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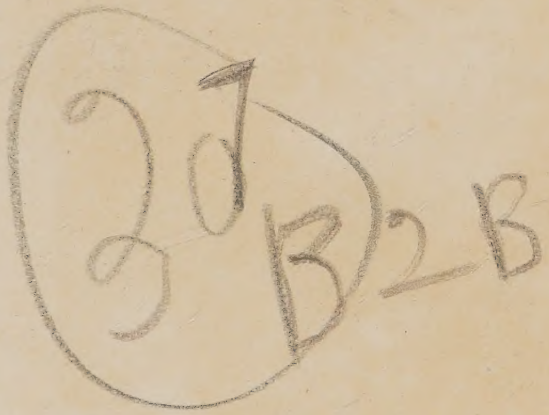

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EXAMINATION QUESTIONS

AND

MODEL ANSWERS

A HANDBOOK FOR NURSES ENTERING FOR THE CENTRAL MIDWIVES BOARD EXAMINATION, WITH ABRIDGED RULES

SECOND EDITION

SECOND IMPRESSION

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EDITOR'S NOTE

THIS little handbook is issued to meet the request for the latest Question papers set at the recent Examinations of the Central Midwives Board.

The Answers, which are reprinted from "The Nursing Mirror," have been carefully thought out, and it is hoped that these Answers, together with the Rules contained in the following pages, will be of assistance to the pupil midwife entering for the C.M.B. Examination.

The Central Midwives Board Rules for 1925 were published while this edition was in the press. The only change to be made in the Abstract of Rules on pages 109 to 150 of this book, is on page 123, where the second paragraph should read :—

"*Note.*—The medical practitioner responding to this call in the case of any emergency as defined in the Rules framed under Section three 1 (*e*) of the Midwives Act, 1902 (see Rule E, 20), will be paid, etc."

February, 1925.

CONTENTS

C.M.B. EXAMINATION QUESTIONS AND MODEL ANSWERS.

AS one of the best methods of preparing for an examination is to practise the answering of questions set at previous examinations, the following questions and answers are given as a guide to the pupil midwife. They represent question papers of the Central Midwives Board Examinations during the past three years, together with model answers which have been carefully thought out by a certified midwife. It may be pointed out that when a question necessitates an answer subdivided, it is far better that they should be given in tabulated form, i.e. 1, 2 and so on. The number of questions given at each examination is six.

Question.—Describe the vagina, its orifice, and the perineum. What changes do these undergo during labour, and how do you protect the perineum from laceration?

Answer.—The vagina is the passage leading from the vulva to the uterus. It is composed chiefly of muscle and lined with mucous membrane. The anterior wall, which measures roughly 2½ inches, is shorter than the posterior which measures 3½ inches. In front the lower part of the vagina is closely united to the urethra, and the upper part to the base of the bladder; behind, its lower inch is attached to the perineal body; its upper inch is in relation

to that portion of the peritoneal cavity known as Douglas' pouch, and between the two the rectum is in close attachment. Its upper rounded end is known as the vaginal fornix. The lower end of the cervix projects into the vagina. It is capable of being greatly stretched, and it can also contract so that when the head of the child has entered it during labour it may help to expel it.

The orifice of the vagina lies between the labia minora, it is partially closed by a membrane called the hymen. As a result of the pressure of the child's head during its passage through the vaginal orifice the hymen is destroyed and is represented by a few irregular masses of tissue called carunculæ myrtiformes.

The perineum is composed mostly of muscular tis ue bound together by connective tissue. It is triangular-shaped and is situated between the lower inch of the vagina and the rectum.

To protect the perineum from laceration:—

(*a*) Prevent the head being born too quickly.

(*b*) Promote flexion of the head until the occiput is born.

(*c*) Deliver the head between the pains. The advance of the head can be delayed by pressure thereon. The patient must no longer use her pulley, and she should be encouraged to call out during the pain. The head must be kept flexed by the tips of the fingers being pressed upon the forehead until the occiput has escaped from under the pubic arch, then as the pain diminishes in force the head is allowed to extend slowly.

The midwife must see that the shoulders rotate into the antero-posterior diameter of the outlet and carry the body well forward in delivering.

Question.—What investigations would you make of a woman advanced in pregnancy who has had previous labours? State the reasons for these investigations.

Answer.—The patient's previous history should be taken as regards her general health, previous illnesses, discharge, history of previous pregnancies and labours. Abortions, stillbirths, and premature labours would lead one to suspect syphilis, and difficult labours might indicate a contracted pelvis.

Her general appearance should be noted, stature, signs of rickets or pendulous abdomen; these might mean a contracted pelvis. Then note colour, tongue, teeth, whether well-nourished or not. Her temperature and pulse should be taken, and if short of breath her respirations counted. Look for varicose veins, œdema, rashes, and advise medical treatment where necessary. The breasts must be examined and the urine tested for albumin.

Make an abdominal examination; note size, shape and position of uterus, contractions and movements of the child. Palpate and make sure that the presentation is normal or not, and whether the head is engaged in the pelvis, or can be pushed easily into the brim. Listen to the fœtal heart to find out the condition of the child.

A vaginal examination may be made in advanced pregnancy to ascertain if labour has begun, if the promontory of the sacrum can be felt, if there is any bleeding, discharge or sores in which case the patient must be referred to a doctor.

Question.—What is meant by the second stage of labour? What symptoms would lead you to consider

it to be unduly prolonged? What are the common causes of delay?

Answer.—The second stage of labour is the stage of expulsion. It lasts from the complete dilatation of the cervical canal till the birth of the child. It usually continues in a primipara about two hours, and in a multipara about one hour.

Symptoms showing that the second stage was unduly prolonged would be: Good pains and no advance of the presenting part; rising temperature and pulse rate with dry, furred tongue and perhaps vomiting; pains becoming less strong and at longer intervals showing the uterus was becoming exhausted; vulva swollen and œdematous, vagina hot and dry; the child showing signs of distress; very rapid or slowing of fœtal heart sounds, passing meconium in a vertex presentation, weak pulsations of cord in a breech presentation.

Causes of delay in the second stage of labour :—

(1) Increased resistance. (*a*) Contracted pelvis; (*b*) abnormality or malposition of child; (*c*) unflexed head; (*d*) loaded rectum, distended bladder; (*e*) rigidity of perineum or vagina, œdema, prolapsed vaginal wall; (*f*) too late rupture of membranes.

(2) Weak expelling force. (*a*) Uterine inertia primary or secondary; (*b*) patient not using her pains.

Question.—Describe the care of the breasts during the lying-in period. What difficulties may arise and how would you deal with them?

Answer.—During the lying-in period the breasts should be washed twice daily, the nipples should be swabbed with sterile water before and after each feed; in the intervals a pad of sterile gauze should be kept over the

nipples and kept in place by a well-applied breast binder. The child should be put to the breast at regular intervals. The breasts often become more or less engorged about the third day. This may be relieved by hot fomentations —partial exhaustion of the milk (if the baby does not empty the breast), a reduced fluid diet and free purging. If the nipples are sore or slightly cracked, Friar's balsam may be applied, or perchloride of mercury (1-1000); if severely cracked a nipple shield must be used.

If there is any sign of inflammation of the breasts the midwife must send for medical help.

If the woman is not nursing her child the breasts should be covered with cotton wool and firmly bandaged, the bandage being tightened whenever it gets loose. Fluid nourishment should be limited and saline purgatives given.

Question.—What are the causes of retention of urine during (*a*) pregnancy, (*b*) labour, (*c*) the lying-in period? How would you recognise it? What would you do in each case?

Answer.—The causes of retention of urine during (1) pregnancy are: pressure on the bladder and urethra; (*a*) when the uterus is retroverted the cervix may press on the neck of the bladder, and if the uterus does not rise out of the pelvis at the third month, being enlarged it fills the cavity and presses against the urethra. (*b*) In cases of exaggerated anteversion. (*c*) When the uterus engages deeply in the pelvis in the last two weeks of pregnancy. It is usually recognised by being associated with incontinence of urine, the over-full bladder can no longer retain more than a certain amount of urine and

small quantities are continually being forced past the obstruction.

Treatment.—Pass a catheter with all antiseptic precautions. Retention of urine in the early months of pregnancy should be referred to a doctor for treatment.

(2) Labour. This is caused by the head of the child pressing against the urethra. It is recognised by a swelling above the pubis.

Treatment.—Pass a catheter. The woman should be encouraged to pass urine frequently during the first stage of labour.

(3) The lying-in period. The common cause of retention of urine is the recumbent position ; other causes are muscular fatigue, the difference in the abdominal pressure, and nervousness of the patient. It is recognised as a swelling over the region of the bladder and by the uterus being higher in the abdomen than it should be.

Treatment.—Simple measures should first be tried, pressure on the bladder, hot fomentations, hot water in the slipper. If the woman has had a normal labour tighten her binder and help her to sit up. If these methods are not successful a hot enema may be given or a catheter passed with antiseptic precautions.

Question.—Describe a case of inflammation of the infant's eyelids. What are the causes, and how may it be prevented? What are the requirements of the Board in such a case?

Answer.—In a case of severe inflammation of the infant's eyelids they are red, swollen and glued together. There is a profuse discharge of pus, which accumulates rapidly under the eyelids and when they are separated it

wells out and flows over the cheek. Exposure to light or manipulation causes pain. If the inflammation extends to the cornea, white patches result which may ulcerate and so the eye is destroyed.

The *causes* are (*a*) infection of the child's eyes from a vaginal discharge in the mother; (*b*) introduction of germs due to careless nursing.

Prevention.—In all cases where there is a purulent vaginal discharge, the midwife must try and secure the services of a registered medical practitioner. If medical help is not obtainable, she should give the woman antiseptic vaginal douches until the membranes rupture. The patient must remain in bed and the membranes be kept intact as long as possible. As soon as the child's head is born, and if possible before the eyes are opened, the eyelids must be carefully cleansed and the hands and arms wiped on a clean rag. The face of the child must not be washed in the water used for its body. As a further preventive of infection one drop of solution of nitrate of silver (1 per cent.) may be put into the baby's eyes. The requirements of the Board are that medical help must be sent for in the case of a pregnant woman, or a woman in labour, where there is a purulent discharge or sores of the genitals; in the case of the child, where there is inflammation of, or discharge from, the eyes, however slight.

Question.—Give a short description of the urinary organs. Of what use are the kidneys?

Answer.—The urinary organs consist of kidneys, ureters, bladder, urethra. The kidneys, two in number, are situated in the right and left loins, one on each side of the vertebral column. They are bean-shaped organs

measuring about 4 inches in length, and 2½ in breadth, and weighing about 4 ounces each. They are held in position by their own vessels and by a quantity of areolar tissue which usually contains much fat. The surface of the kidneys is smooth and of a deep red colour. The ureters are two small muscular tubes, lined with mucous membrane. They are attached above, one to each kidney, and below to the bladder. They are about 10 inches in length. Their function is to conduct urine from the kidneys to the bladder. The bladder is a hollow organ composed principally of involuntary muscle; lined with mucous membrane and covered with peritoneum except below. It is situated behind the symphysis pubis, and in front of the uterus. The lower part of it is attached to the anterior wall of the vagina. It is capable of being greatly stretched. The urethra is a muscular tube about 1½ inch long, leading from the bladder to the vulva; it is embedded in the anterior wall of the vagina, and opens into the vestibule.

The kidneys are excretory organs and their use is to separate certain poisonous substances which have accumulated in the blood during its circulation throughout the body. These impurities are water, urea, carbonic acid, salts, and bile.

Question.—What are the essential details of management needed for the care of a baby born two months before full time?

Answer.—The essential details of management in the case of a seven-months' baby are (1) to see that the body temperature is maintained; (2) that it is properly fed; (3) that it is carefully watched and kept free from infection.

(1) Maintenance of body temperature. The body should not be bathed, but the skin rubbed over quickly with warm olive oil and covered with warm cotton wool. Its clothing should consist of a woollen vest with long sleeves, a flannel binder, a napkin, and a flannel gown. The cradle should be placed on a chair near the fire, in a tent made with a screen and kept at a temperature of 70° F. Well-protected hot-water bottles should be put in the cradle. The baby should be protected from exposure, and handled as little as possible; it should be fed and changed in the tent.

(2) Proper feeding. A seven-months' baby should be fed from birth. Cream and sterile water (1-12) or whey and cream may be given, 1 or 2 drachms every two hours. As soon as the mother's milk is secreted the baby may be put to the breast, but if it is very feeble or cannot suck, the breast must be exhausted and the baby fed with a spoon or a dropper.

(3) Premature babies are more liable to convulsions; they therefore need careful watching. Special care should be paid to eyes and mouth, and all apparatus used for feeding must be sterilised.

Question.—Describe the natural process of separation and expulsion of the placenta, both what you can see and what you can feel. State without details what complications may arise when the normal process does not take place.

Answer.—After the birth of the child the uterus commences again to contract and retract strongly, with the result that the placental site becomes much smaller. The placenta, being inelastic, is unable to shrink with the placental site, and so becomes detached, the separ-

ation commencing at its lower edge. After the placenta is separated, it is expelled by the contractions of the uterus though the result is often too slight to expel it further than the vagina—then the process is finished by the patient holding her breath and bearing down strongly. The expulsion of the placenta is usually assisted by the midwife applying pressure to the fundus of the uterus during a pain.

When the placenta has become separated the midwife will feel: (1) the top of the uterus rise to the umbilicus; (2) its consistence become much harder; (3) its size become notably smaller; (4) its shape alter from broad to round; (5) it will become more movable. She will see (1) the cord lengthen; (2) a small gush of blood.

Complications that may arise when the normal process does not take place:—

(1) Post-partum hæmorrhage from a partially separated placenta.

(2) Retention of a small piece of placenta or placenta succenturiata or of the membranes resulting in secondary post-partum hæmorrhage.

(3) Sepsis due to manipulation or to infection of the retained portions.

(4) Collapse of patient from hæmorrhage and predisposition of patient to sepsis owing to lowered vitality.

(5) Inversion of uterus due to expression of the placenta in the interval of a pain.

Question.—State the various methods of arresting uterine hæmorrhage during pregnancy and after delivery of the child. In what circumstances would you, as a midwife, employ any particular method?

Answer.—Uterine hæmorrhage in the early months of pregnancy may be arrested by complete rest. If the miscarriage is inevitable, hot vaginal douches may be given, and if the bleeding is severe the vagina must be plugged.

For hæmorrhage occurring in the latter months of pregnancy the treatment would depend on the cause and amount of bleeding, and on the condition of the patient. If labour had commenced, the os dilated and the presentation normal, the membranes should be ruptured and a tight binder applied.

If the bleeding was due to placenta prævia and the child presenting by the breech, a leg should be pulled down, so that the half breech would form a plug. Plugging the vagina, and applying a tight binder when the cervix is not well dilated is the best treatment for severe hæmorrhage.

If hæmorrhage occurs after the birth of the child, the uterus must be emptied—the placenta expressed or removed manually, and then a hot intra-uterine douche given, and if this is not effectual bi-manual compression must be done, until the uterus has contracted, and the bleeding is arrested, when ergot must be given by mouth or by intra-muscular injection.

As a midwife, under the rules of the Central Midwives Board, I should send for a registered medical practitioner in all cases of hæmorrhage, and only where the bleeding was very severe and medical help not available, would I plug the vagina for anti-partum hæmorrhage. For post-partum hæmorrhage, however, the case is different and the patient's life in danger. Having sent for medical help, I should at once try to control the bleeding by the

methods I have given above—viz. emptying the uterus, hot intra-uterine douche, and bi-manual compression.

Question.—What are the dangers of vaginal examination during labour? How can these dangers be avoided, and what information do you gain from such an examination?

Answer.—The dangers of vaginal examination during labour are the introduction of germs, giving rise to sepsis; the accidental rupture of the membranes delaying and sometimes complicating labour, and in a face presentation injury may be done to the child's eyes.

These dangers can be avoided by strict surgical cleanliness both of the midwife's hands and of the patient's external genitals—by not making more internal examinations than are absolutely necessary, and by making the examination during the interval between the pains.

Information to be gained from such examinations is—(1) The presenting part, its position in the pelvis; whether fixed or movable, the advance during labour—the prolapse of the cord. (2) The bag of membranes—size, shape, and condition. (3) Size of the os and length and condition of cervical canal. (4) The pelvis and whether the sacral promontory can be felt. (5) The condition of the rectum and vagina.

Question.—Describe the brim of the pelvis. What bones form it? What are its measurements?

Why is the knowledge of these matters so important to a midwife?

Answer.—The brim of the pelvis is heart shaped. It is formed by the upper margin of the pubes in front, the ilio-pectineal line at the sides, and the anterior and upper

margin of the sacral promontory behind. The bones forming the brim are the pubic bones anteriorly, the innominate bones formed of the ischia and the ilia laterally and the sacrum posteriorly. The measurements of the brim are :—

(*a*) The antero-posterior or conjugate taken from the mid point of the sacral promontory to the nearest point on the upper and inner margin of the symphysis pubis, 4 to 4½ inches.

(*b*) The oblique diameters, taken from the right and left sacro-iliac joints to the opposite ilio-pectineal eminences, 4½ inches.

(*c*) The transverse diameter taken between the most distant points on the ilio-pectineal line, 5 inches.

It is very important that the midwife should know the proper size of the pelvis, since any deviation from this is likely to cause difficulty during labour.

Question.—Describe the conditions under which premature rupture of the membranes may occur. What complications may arise in consequence ?

Answer.—Premature rupture of the membranes usually occurs in those cases in which the presenting part does not engage well in the brim of the pelvis, such as contracted pelvis, shoulder, face and breech presentations. There is a larger bag of fore-waters, more separation of the membranes from the lower uterine segment, and increased tension. Membranes may rupture prematurely where there is excess of liquor amnii. Complications that may arise in consequence are: (1) Delay in the first stage of labour, the bag of membranes being the best dilator of the cervix. (2) Difficulty in rectifying a mal-presentation. (3) Obstructed labour where the

pelvis is contracted or the presentation abnormal. (4) In case of prolapse of cord the dangerous pressure may cause death of child. (5) Asphyxia of child, due to contracting uterus pressing so tightly upon it as to interrupt placental circulation.

Question.—A woman, while suckling her baby, thinks she is pregnant because she feels fœtal movements. How would you decide if she be pregnant, and, if so, the probable time of her confinement?

Answer.—To decide if the woman was pregnant or not an abdominal and a vaginal examination should be made.

Quickening, the term given to the mother's sensations when she first feels the fœtus move, occurs from the 18th to the 20th week of pregnancy.

By the 20th week the abdomen should be enlarged, the uterus should reach midway between the umbilicus and the symphysis pubis. There may be intermittent uterine contractions. It is not easy to make out fœtal parts owing to the small size of the fœtus. Fœtal heart sounds could be heard with a stethoscope.

By vaginal examination, the external os in a multipara is nearly always open and the finger can be passed up the cervical canal, but it will appreciate the fact that some solid body is filling up the lower uterine segment. And a sign called ballottement can be obtained.

To calculate the probable time of confinement. If the woman can give a definite date of quickening and the abdominal signs correspond, tell her she may expect her baby in about twenty weeks from that date.

Question.—What are the common causes of sore buttocks in infants? What can you do to prevent this

condition? What measures would you adopt to relieve it?

Answer.—The common causes of sore buttocks in infants are: (1) Unhealthy fæces, diarrhœa, green, acid and watery stools. (2) Want of cleanliness. (3) Neglect in changing soiled napkins. (4) Congenital syphilis. (5) Use of napkins that have been washed in water containing soda.

Treatment to try and prevent them. The baby's mouth and mother's nipples must be kept clean. If baby is bottle-fed great care should be taken to give clean milk, wi h clean bottles and teats. The napkins should be changed as soon as they become wet or soiled, and the buttocks washed and thoroughly dried. If the buttocks become red and sore, olive oil must be used in place of water to cleanse them, and a paste made of equal parts of zinc ointment and castor oil applied. The napkins must be changed frequently to ensure cleanliness and the ointment should be spread on a piece of lint and applied to the sore area to ensure that the part is kept constantly covered with grease.

Question.—What is meant by a purulent vaginal discharge? How would you recognise it in a pregnant woman? What are its dangers? What is your duty in such a case?

Answer.—A purulent vaginal discharge is a yellow and often offensive discharge from the vagina containing pus and associated with gonorrhœa. It is recognised in a pregnant woman when on making a vaginal examination pus is seen to be oozing from the vagina and round the orifice of the urethra.

Dangers of a purulent discharge. To the mother: (*a*)

Septic infection of the uterus; (*b*) infection of the bladder resulting in cystitis; (*c*) infection of the breasts. To the child: (*a*) infection of the eyes resulting in ophthalmia and possibly blindness; (*b*) infection of the mouth and other mucous membranes.

The duty of the midwife in such a case is to explain to the patient that the case is one in which the advice of a registered medical practitioner is necessary, and to fill in the form for sending for medical help and hand it to the patient or the nearest relative or friend to be sent to the medical practitioner.

Question.—How would you recognise that the uterus is involuting properly during the puerperium? What ill effects follow the failure of this process? What can a midwife do to aid involution which is not progressing satisfactorily?

Answer.—The midwife would recognise that the uterus was involuting properly if it shrank to its normal size and position in the normal time, and if the lochia did not remain red and profuse after the first week.

The rate of involution is measured by the height of the fundus above the symphysis pubis; this should be ½ inch lower each day, at the end of a week it should be about 2½ inches above the symphysis pubis and should not be tender. Ill effects which might follow the failure of involution are severe after pains, profuse and red lochia—a likelihood of secondary post-partum hæmorrhage, a risk of sepsis.

A midwife might aid involution by giving her patient hot antiseptic vaginal douches, by giving small doses of ergot three times a day, and by keeping her patient propped up in bed.

Question.—Describe the vagina. What organs near it? What changes does it undergo during pregnancy?

Answer.—The vagina is the passage leading from the vulva to the uterus. It is composed chiefly of muscle and lined with mucous membrane. The anterior wall, which measures, roughly, 2½ inches, is shorter than the posterior wall, which measures about 3½ inches. The hymen, a thin septum of mucous membrane, is attached to its orifice. In front the lower part of the vagina is closely united to the urethra, and the upper part to the base of the bladder; behind, its lower inch is attached to the perineal body; its upper inch is in relation with that portion of the peritoneal cavity known as Douglas' pouch, and between the two the rectum is in close attachment. The lower end of the cervix projects into the vagina. It is capable of being greatly stretched, and it can also contract.

During pregnancy the vaginal walls enlarge, so that the anterior wall may protrude somewhat through the vulval opening. The secretion is increased, and there is blue coloration, due to congestion, and generally plainly seen about the fourth month.

Question.—What are the reasons for the regular examination of the pregnant woman?

Answer.—Every woman, without exception, who is pregnant should be properly examined by a qualified person; in many cases some abnormality may be discovered which, if properly treated, may save her life and that of the child. If a woman is passing very little urine, with persistent headache, failing eyesight, swelling of hands and feet, she should be examined, as these

conditions may lead to eclampsia. Her urine should be examined frequently during the last weeks of pregnancy, and if albumin is present she should be treated for it by a medical practitioner. If there is any loss of blood, however slight, an examination should be made and similar advice given, as this may be an indication of miscarriage or of accidental or unavoidable hæmorrhage. If the woman is a dwarf, deformed, or shorter than the average, she should be examined, as with these conditions a contracted pelvis may be present. She should be examined during the last two weeks of pregnancy to determine the relation of the head to the pelvis, and if it has already engaged or can be pushed in, or if there is a malpresentation that can be corrected.

She should be examined if there is purulent discharge or sores of the genitals, that she may undergo treatment with the view of lessening the danger of the child's eyes being infected at birth, and of her infecting herself and becoming septic.

Question.—Describe in detail your management of labour in an uncomplicated breech presentation.

Answer.—Keep the membranes intact as long as possible; therefore, the patient should be kept at rest in bed, and frequent vaginal examinations should be avoided. When the membranes rupture a vaginal examination should be made to see if the cord has prolapsed. The fœtal heart sounds must be listened for and counted at frequent intervals. The bladder must be kept empty. For delivery it is better to put the patient in the dorsal position, across the bed, with the feet supported on two chairs. Leave it as far as possible to Nature until the child is born to the umbilicus. Cover the breech with a

warm sterile towel. Draw down a loop of the cord, and if it is pulsating normally wait for the shoulders to be born. Then grasp the child by the pelvis, rotate the occiput under the pubic arch, and carry the body forward as the head is born, keeping good supra-pubic pressure with the other hand. A warm bath should be prepared beforehand, with warm wool and brandy, in case the child should be asphyxiated at birth.

Question.—What are the common causes of obstructed labour? How do you recognise the early stages of this condition?

Answer.—Causes of obstructed labour are:—

1. Disproportion between presenting part and the pelvis.
2. Malposition of the child—i.e. persistent occipito-posterior; transverse; brow.
3. Malposition of the uterus—i.e. exaggerated anteversion.
4. Rigidity of cervix or soft parts.
5. Growths in uterus or pelvis.

Obstructed labour is recognised by the fact that labour is delayed. It is further recognised if in the second stage there are good pains and no advance of the presenting part, if a large caput is formed, if the patient's pulse and respirations become quickened and her temperature rises. In a short time the patient would show symptoms of exhaustion, the expression become anxious, and she might vomit. The uterus would become tender and the vagina hot and dry.

Question.—How would you tell that a mother's milk is insufficient? If it is so, what would you do to try to improve it?

Answer.—If a mother's milk was insufficient the baby would not thrive. If it lost or remained stationary in weight, but did not vomit, and there were no curds in the stools, it would be an indication that it was receiving too little food. It would be cross and fretful, not sleeping as long as it should do, and it might refuse to take the breast. The mother should be encouraged to persevere with breast-feeding, and to take plenty of fluid nourishment herself—eggs, gruel, porridge, milk, cream. Lactagol, a preparation of cotton-seed, is sometimes given. It is said to stimulate the breasts to secrete milk, and to improve the secretion both in quantity and quality.

Question.—What causes of fever in the puerperium do you know of? What information would you endeavour to obtain for the doctor when he arrives if a patient's temperature rose to 104° on the third day after labour?

Answer.—Rise of temperature during the puerperium may be due to:—

1. Sepsis: (*a*) septicæmia; (*b*) sapræmia; (*c*) white leg; (*d*) abscess of breast.

2. Non-septic causes: (*a*) reactionary; (*b*) gastro-intestinal causes; (*c*) emotional; (*d*) engorged breasts.

In the case of a patient with a temperature of 104° on the third day the midwife, pending the arrival of the doctor, would endeavour to find out the cause. If the rise was due to sepsis she would note the pulse-rate, find out if the patient had had rigors, whether the uterus was tender to the touch, and if the lochia was offensive.

She would examine the breasts and see if they were hard, knotty, painful, and engorged, and if there were redness and inflammation. She would satisfy herself

that the patient had had an action of the bowels, as constipation and gastro-intestinal disturbances are a common cause of rise of temperature on the third day. She would also make inquiries as to whether the patient had been unduly excited from any cause.

Question.—Describe in detail the abdominal examination of a woman advanced in pregnancy. What information do you endeavour to obtain from such an examination?

Answer.—The patient should lie on her back with the knees drawn up, head and shoulders slightly raised. The examination consists of three steps—

1. *Inspection.*—Note the abdomen, amount of distension, pigmentation, striæ, protrusion of the umbilicus, œdema, rashes, old scars, size and shape of uterus, contractions, movements of the child, the bladder if distended.

2. *Palpation.*—The midwife should stand on the right side of the patient, facing her feet, and lay both hands (which should be warm) on the sides of the uterus, with finger-tips pointing downwards, and press them into the brim of the pelvis; the presenting part, the degree of engagement, and some idea of the size may thus be obtained. She should then face the patient's head, with her hands over the fundus and sides of the uterus, and determine the direction of the back, which offers the greatest resistance: the limbs are felt as irregular projections, and movements can often be felt which aid diagnosis of position.

3. *Auscultation.*—The fœtal heart must be listened to and counted. Information which may be obtained from this examination is the size of the child: relation of the

head to the pelvis; the position, whether normal or a mal-presentation; if there are twins; hydramnios or œdema. The condition of the child may be ascertained by listening to and counting the fœtal heart sounds.

Question.—How would you recognise the symptoms of exhaustion during labour in the order in which they commonly arise? What are the usual causes?

Answer.—I should recognise the symptoms of exhaustion during labour by carefully observing the general condition of the patient. The expression is tired, drawn, and anxious; she is discouraged, and lacks general tone; the pulse rate is increased and the temperature raised. The skin becomes hot and dry, or covered with a cold perspiration. The lips and tongue are dry, and perhaps brown. She may vomit. The pains, strong and regular at first, become weak and ineffective, and finally cease (secondary inertia), or the uterus may become tonicly contracted and rupture threatened.

The usual causes of exhaustion are prolonged labour, due to increased resistance—(*a*) disproportion between child and pelvis; (*b*) abnormality or malposition of child; (*c*) contracted pelvis; (*d*) rigidity of perineum or vagina, œdema or persistent anterior lip of cervix; (*e*) unflexed head; (*f*) too early rupture of the membranes.

Question.—Severe bleeding occurs after the birth of a child and before the placenta has left the uterus. Describe in detail how you would treat such a case.

Answer.—The patient should be turned on to her back and the uterus stimulated by massage to contract, and if the placenta has left the uterus it should be expressed by gentle pressure downwards and backwards. If the placenta is partially attached to the uterine wall

medical aid must be obtained, and the midwife must try and control the bleeding by massage of the uterus and by squeezing it. If, however, the bleeding is severe, and failing medical assistance, she must, with antiseptic precautions, insert her hand into the uterus and remove the placenta manually, then give a hot intra-uterine douche (temperature 118°). If this does not control the bleeding she must do bi-manual compression until retraction occurs or medical help arrives. Ergot may be given by mouth, or an intra-muscular injection. As soon as the hæmorrhage is stopped the patient must be treated for shock.

Question.—What difficulties may arise in connection with breast feeding? How can they be overcome?

Answer.—The condition of the breast may make nursing difficult, such as depressed or cracked nipples, mastitis, defective or excessive secretion.

For depressed nipples, gently pull them out with clean fingers, and use a nipple shield until the infant is able to grasp. For cracked nipples, paint on some astringent lotion—glycerine and tannin, perchloride of mercury (1-1000), Friar's balsam—and use a shield until they are healed. For mastitis, hot fomentations hourly and the breasts relieved by means of a breast pump. For defective secretion the mother must take plenty of fluid nourishment—eggs, gruel, porridge, cream. For excessive secretion fluid food must be decreased and a gentle saline aperient given, some milk expressed before giving a feed, and the infant allowed shorter time than usual. See that the child is held comfortably during the nursing, and that the mother is not preventing the baby feeding properly. The child may be premature, or have bare

lip or cleft palate, or it may be suffering from facial paralysis. In these cases the milk should be exhausted and given with a spoon.

Question.—Describe the normal lochia during the first ten days. What abnormal changes may occur in this discharge?

Answer.—Lochia is the healthy discharge from the uterus during the lying-in period. For the first twenty-four hours it consists chiefly of blood; afterwards it becomes more watery, but remains red for three or four days. It also contains shreds of decidua, epithelial cells, mucus and secretion from the vagina. Towards the end of the first week it changes to brown, gradually becoming fainter in colour and less in quantity, and should cease by the end of the second week.

Abnormal changes—(*a*) It may become offensive, due to septic infection, causing decomposition; (*b*) it may become suppressed, also due to septic infection; (*c*) it may be excessive or remain red unduly long, due to sub-involution from retained clots or portions of placenta, or from excessive exertion.

Question.—What precautions should you take in nursing during the puerperium a woman who is suffering from (*a*) gonorrhœa, (*b*) syphilis?

Answer.—A midwife attending a woman with the vulval signs of gonorrhœa must at once report the case to a doctor. She must be most careful to use the greatest precautions when attending to the patient, lest she convey the disease to some other patient, her own eyes, or those of the child. For this purpose she must most carefully wash her hands after attending to the patient, and all lint wool, etc., which was used for

swabbing the vulva must be burnt, while any linen that has been soiled with the discharge must be soaked in hyd. perch. (1-1000) before it leaves the room. The midwife should, if possible, wear indiarubber gloves.

A midwife nursing a patient suffering from syphilis must never forget how highly contagious the disease is. The treatment must be conducted by a doctor. She must wear indiarubber gloves, which can be boiled after use, when attending to the patient. All feeding utensils, towels, etc., used by the woman must be kept for her separate use, and not removed from the room until they have been boiled or soaked in an adequate disinfectant. A syphilitic person should not be allowed to kiss another, neither should a baby born of syphilitic parents ever be fed by a wet nurse, since the latter may be infected through her nipple.

Question.—Describe the full-time placenta with the cord and membranes. What are the functions of the placenta?

Answer.—The placenta is an oval spongy organ, purplish-red in colour. It weighs about 20 ounces, is about 8 inches in diameter and 1 inch in thickness. It consists of two portions:—

(*a*) Maternal—that portion which before separation was in contact with the uterus. It is rough and divided by depressions into a number of small areas. The torn edges of numerous bloodvessels can be seen projecting from this surface.

(*b*) Fœtal—that portion which looks towards the fœtus before its birth. Its smooth and shiny appearance is due to the amnion, which covers it, and underneath this can be seen the umbilical vessels radiating from the

insertion of the umbilical cord. Attached to the fœtal surface is the umbilical cord; this is a bluish-grey twisted tube-like structure about 20 inches in length, composed of a jelly-like substance, and contains two arteries and one vein. It is covered on the outside by the amnion.

The membranes consist of the amnion and the chorion, which can be separated as far as the insertion of the cord. The amnion is a smooth, thin, shiny, transparent membrane. The chorion is thicker and more opaque than the amnion, but is not so tough. It is rough on its outer surface from small pieces of the decidua which adhere to it. It is attached all round to the margin of the placenta, from which it cannot be separated.

The function of the placenta is threefold—respiratory, nutritive, and excretory. There is no communication between the fœtal and maternal blood-streams circulating in the placenta, but the amount of tissue between the two is so minute that these functions are able to take place. Oxygen passes from the maternal blood into the umbilical vein of the fœtus, and carbonic acid passes from the fœtal blood into the maternal sinuses. In the same way nourishment is able to pass from the maternal blood into the fœtal, and waste products from the fœtal blood into the maternal.

Question.—What is meant by the term "Uterine inertia"? What varieties are there? By what signs and symptoms would you recognise them?

Answer.—Uterine inertia means that the uterus is weak; the contractions are feeble, ineffectual, or even absent. There are two varieties, primary and secondary. 1. In primary inertia the contractions are weak and

infrequent, but retraction is normal; labour is therefore tedious, but the third stage ends satisfactorily. Pulse and temperature are normal. 2. Secondary uterine inertia is exhaustion of the uterus. It is that condition where the pains have commenced quite normally, but have gradually got weaker and less frequent until they have stopped altogether. The patient is tired and generally wants to go to sleep. Pulse and temperature are normal.

Question.—How do you ascertain that labour has actually started? What conditions resemble, and must be distinguished from, the actual onset of labour?

Answer.—Labour may be said to have actually started when the pains are regular, increase gradually in frequency and severity, when they are felt in the region of the sacrum, and are accompanied by the show and by contractions of the uterus, and when there is dilatation of the cervix. There is a condition of false labour pains from which some women are apt to suffer during the last few days of pregnancy. The pains are irregular and of a colicky nature, and are due to intestinal irritation. They are felt in the abdomen, and an aperient will soon ease them.

Question.—A first labour has lasted for twenty-four hours. What conditions would necessitate sending for medical help in such a case?

Answer.—Medical help should be obtained where a first labour has lasted for twenty-four hours under the following conditions: 1. Where the membranes have ruptured early and the cervix is rigid and not dilating. 2. Any presentation other than the uncomplicated vertex or breech. 3. Persistent occipito posterior 4. Good

pains and no advance. 5. Uterine inertia, either primary or secondary. 6. Rising temperature and quickening pulse. 7. Fits. 8. Presentation or prolapse of cord. 9. Fœtal distress—i.e. slowing and weakening of the fœtal heart, or passing meconium with the vertex presenting.

Question.—What information do you obtain from a daily examination of the baby's motions during the time of your attendance?

Answer.—Daily examination of the baby's motions helps one to judge if the child is thriving, and if its food is sufficient and of the right consistency for it. The normal stool for the first few days is dark greenish meconium; this gradually becomes lighter in colour and softer in consistency. After the third day the stools should be yellow, semi-fluid, and smooth, with little odour. Abnormal stools are green, offensive, and watery, indicating that the infant is suffering from gastro-intestinal disturbances. They may be dry and crumbling, indicating an insufficiency of fat in the milk; they may contain curds, showing that the milk is not thoroughly digested; and they may contain blood and mucus.

Question.—State three of the most important circumstances which must be notified to the Local Supervising Authority. How is such notification carried out?

Answer.—Three important circumstances which must be notified to the Local Supervising Authority are: 1. Whenever under Rule 20 the advice of a registered medical practitioner has been sought. 2. In all cases of stillbirth where a registered medical practitioner is not in attendance at the time of birth. 3. Whenever

a midwife has been in attendance, whether as a midwife or as a nurse, upon a patient, or in contact with a person suffering from puerperal fever, or from any other condition supposed to be infectious, or is herself liable to be a source of infection. The midwife must as soon as possible send the notice on the prescribed form to the Local Supervising Authority.

Question.—How do you recognise that the breech is presenting? Describe in detail your management of breech labour, and state your reasons for each step.

Answer.—A breech presentation would be recognised—

(1) *By abdominal palpation.*—The hard, resistant head is not felt in the pelvis, but a more indefinite mass (the pelvis of the infant). The back of the child is, as a rule, easily defined. On palpating the fundus the hard globular head will be felt, which can be moved to and fro independently of the trunk. The fœtal heart is best heard through the back of the child, at or above the level of the umbilicus.

(2) *By vaginal examination.*—The presenting part is usually high, and the bag of membranes, if unruptured, may be elongated. After rupture of the membranes the anus is felt with the cleft between the buttocks; the sacrum, the coccyx, and the genital organs are felt, and the examining finger, when withdrawn, may be stained with meconium.

Management.—Keep the membranes intact as long as possible; therefore keep the patient on the bed, and avoid frequent vaginal examinations. As long as the membranes remain unruptured there is no danger to the child. When the membranes rupture a vaginal

examination must be made to ascertain if the cord has prolapsed. The fœtal heart must be listened for and counted at frequent intervals to make sure that the child is not getting distressed. The bladder must be kept empty; a full bladder tends to delay labour. The patient may be delivered in the dorsal, or left lateral position. When the buttocks are born cover them with a warm sterile towel to prevent cold air striking upon the child, and causing it to take a premature inspiration. Draw down a loop of the cord to prevent it being unduly stretched, and watch the pulsations in it. If normal, wait for the shoulders to be born; then grasp the child by the pelvis, rotate the occiput under the pubic arch, and carry the body forward as the head is born, keeping good supra-pubic pressure with the other hand, or instruct an assistant to do this. The pressure assists flexion and expulsion of the head. A warm bath should be prepared beforehand, also warm wool and brandy, in case the child should be asphyxiated at birth.

Question.—Describe the female bladder and urethra. How does inflammation of the bladder arise during the puerperium? What are the symptoms?

Answer.—The female bladder is a hollow organ, composed principally of involuntary muscle, and it is lined with mucous membrane and covered with peritoneum except below. It is situated behind the symphysis pubis and in front of the uterus. It is connected with the kidneys by the ureters. The lower part of it is attached to the anterior wall of the vagina. The urethra is a muscular tube about 1½ inch long, leading from the bladder to the vulva; it is embedded in the anterior wall of the vagina, and opens into the vestibule.

Cystitis is inflammation of the bladder, due to infection by micro-organisms. The most common cause is carelessness in not observing strict surgical cleanliness in passing the catheter. The symptoms to which it would give rise are (*a*) frequent painful passage of small quantities of scalding urine; (*b*) pain and tenderness over the pubes; (*c*) rise of temperature, with accompanying malaise; (*d*) the urine is alkaline in reaction, contains pus, and is cloudy and offensive.

Question.—Under what circumstances would you consider the second stage of labour unduly prolonged? What ill-effects to the mother and child may arise from its prolongation; and how would you recognise them?

Answer.—I should consider the second stage of labour unduly prolonged (*a*) If there were good pains and no advance; (*b*) if with good pains the second stage lasted longer than three hours in a primigravida, and one hour in a multipara, with no sign of delivery being imminent; (*c*) if the second-stage pains showed a tendency to become less strong and at longer intervals, a sign that the uterus was becoming exhausted; (*d*) if the general health and condition of the patient were such as to contra-indicate severe straining in the second stage—i.e. cardiac cases, albuminuria, ante-partum hæmorrhage—or if the temperature was raised and pulse and respiration quickened; (*e*) if the child showed signs of distress, slowing of the fœtal heart-sounds, passing meconium with the vertex presenting.

Ill-effects to the mother from an unduly prolonged second stage are: (1) Exhaustion of the patient. This would be recognised by the condition of the patient—temperature raised, pulse-rate increased, expression tired,

drawn, and anxious. (2) Secondary uterine inertia may set in, and lead to post-partum hæmorrhage in the third stage. Pains, strong and regular at first, become weak and ineffective, and may cease altogether. (3) Prolonged pressure on the soft parts causes bruising and œdema, with more risk of sepsis in the puerperium. (4) The uterus may become tonicly contracted, and rupture threatened.

Ill-effects to the child.—(1) Asphyxia, recognised by slowing of the fœtal heart, passing meconium with the head presenting. The child may die. (2) Injury. The head may be grooved, dinted, or fractured. The brain may be injured.

Question.—Describe a case of inflammation of the infant's eyes. What are the causes, and how may it be prevented? What are the requirements of the Board in such cases?

Answer.—The earliest sign of inflammation is a thin red line in the centre of the edge of the upper eyelid. Discharge of a clear yellow-coloured fluid from the eyelids quickly follows. The eyelids become red and swollen on their inner surfaces, and a purulent discharge ensues. The eyelids are so swollen that it is difficult to separate them. The discharge may be so profuse that it collects under the eyelids and flows over the cheeks.

The causes are (*a*) infection of the child's eyes from a vaginal discharge in the mother; (*b*) introduction of germs due to careless nursing.

Prevention.—In all cases where there is a purulent vaginal discharge the midwife must try and secure the services of a registered medical practitioner. If medical help is not obtainable she should give the woman

antiseptic vaginal douches until the membranes rupture. The patient must remain in bed and the membranes be kept intact as long as possible. As soon as the child's head is born, and if possible before the eyes are opened, the eyelids must be carefully cleansed and the hands and arms wiped on a clean rag. The face of the child must not be washed in the water used for its body. As a further preventive of infection one drop of solution of nitrate of silver (1 per cent.) may be put into the baby's eyes.

The requirements of the Board are that medical help must be sent for in the case of a pregnant woman, or a woman in labour, where there is purulent discharge and sores of the genitals. In the case of the child, where there is inflammation of, or discharge from, the eyes, however slight.

Question.—What inquiries and observations would you make of a woman who engages you to attend her in her confinement in order to guard against possible dangers to herself and the fœtus?

Answer.—Inquiries that a midwife should make of a woman she was engaged to attend in her confinement are: The state of her general health; whether she suffered from headache, excessive sickness, failure of eyesight, troublesome constipation, swelling of hands and feet; the amount of urine passed. She must be asked if there is any loss of blood, however slight; if there is any vaginal discharge or sores. If it is not a first pregnancy, careful inquiries must be made about the former pregnancies and labours.

Observations to be made are: The size of the woman, whether a dwarf or smaller than usual, deformed or lame;

the size and shape of the uterus, and whether the abdomen is pendulous or not; the relation of the head to the pelvis. Swelling and œdema of face, body, and limbs must be looked for, and the urine examined. Also, observation must be made of varicose veins, sores, rashes, old abdominal scars, and whether the woman looks ill or not. The breasts and nipples must be seen, and advice given as to their care.

Question.—A baby refuses to take the mother's breast. How would you investigate the causes of this, and what treatment would you adopt to relieve such causes?

Answer.—1. *Causes due to the mother.* (*a*) A badly-formed or retracted nipple. For this a nipple shield may be tried or the nipple drawn out with a breast-pump. (*b*) There may be no milk in the breast. (*c*) Faulty position for nursing or laziness. In this case teach the mother how to hold the child, and encourage her to persevere. 2. *Causes due to the baby.* (*a*) The baby may be premature or too feeble to suck, in which case the milk should be exhausted and the child fed with a spoon or bottle. (*b*) It may have a hare lip and cleft palate, facial paralysis, tongue tie, or a sore mouth. Exhaust the milk and feed the baby. (*c*) It may be sleepy and jaundiced. Give a grey powder, and watch that the baby is kept awake whilst at the breast. Medical aid should be procured for sick babies who refuse to take the breast, and for those who suffer from a sore mouth.

Question.—What do you understand by involution of the uterus and vagina after full-time labour? What symptoms and signs during the lying-in period indicate that involution is unsatisfactory?

Answer.—Involution of the uterus and vagina is the

process by which they shrink to their normal size, condition, and position after labour. The signs and symptoms during the lying-in period showing that involution is unsatisfactory are: (*a*) Red lochia persisting after the third day: (*b*) the uterus remaining large, and not sinking at its usual rate in the abdomen: (*c*) the uterus tender if the cause is due to sepsis.

Question.—What are the symptoms and signs which, during pregnancy, would lead you to suspect that eclampsia may occur? What would you do before the doctor arrives? What are the most important points in the nursing of a case of eclampsia?

Answer.—Symptoms in a pregnant woman which would lead to expectation of eclampsia are headache, flashes of light or failure of sight, nausea or vomiting, epigastric pain, giddiness, drowsiness, deafness or noises in the ears, sleeplessness. Premonitory signs are: Puffiness of legs, face, and hands; albumen and perhaps blood in the urine; diminished secretion of urine. Before the doctor arrives the woman should be kept in bed between blankets, with hot bottles and plenty of hot drinks to induce sweating. The bowels should be kept acting freely by means of a purge or enema. The urine should be measured and tested, and a specimen kept for the doctor. Temperature, pulse, and respirations should be taken, and symptoms should be noted. The patient should not be left. False teeth should be removed, and a gag placed at hand in readiness if wanted. The most important points in the nursing of a case of eclampsia are: (1) Prevent the patient hurting herself; place a gag in her mouth; turn the head on one side to allow saliva and mucus to run out. (2) Induce perspiration—hot air

or vapour baths, hot packs, blankets, and hot bottles. (3) Increase the flow of urine—hot drinks if patient is able to take them, barley, and lemon-water. If unable to drink, give saline injections per rectum, intravenous, and sub-cutaneous. (4) Saline purgatives. (5) Perfect quiet.

Question.—Describe the method of sterilising midwifery instruments; also the method for disinfecting the hands and arms.

Answer.—Boiling is the most efficient and practical method of sterilising all instruments, and therefore every article which can be boiled should be sterilised in this manner. Twenty minutes' boiling is sufficient for ordinary purposes. All metal, glass, and rubber instruments are sterilised in this way. Nail-brushes, douche-tubing, towels, swabs, and thread for tying the cord can all be boiled. Glass instruments, such as hypodermic syringes douche-nozzles, catheters, are liable to crack; they should therefore be placed in cold water and brought to boiling-point gradually. Pads and dressings may be sterilised on a small scale by suspending the articles over boiling water, so that the steam percolates through them, or they may be wrapped in a towel and baked in the oven.

Method for disinfecting the hands and arms: (1) Keep the nails short and remove all rings; roll up the sleeves above the elbow. (2) Wash the hands and forearms thoroughly in soap and warm water, and scrub with a nail-brush that has been boiled. (3) Rinse the hands in clean water, but do not dry them. (4) Immerse the hands completely in 1-1000 perchloride of mercury for three minutes.

Question.—What special care does a premature infant require? Give exact details of the methods which you would adopt.

Answer.—The special care required by a premature infant is to see that its—

1. Body temperature is maintained.
2. That it is properly fed.
3. That it is carefully watched and kept free from infection.

1. Maintenance of body temperature. The baby should not be bathed for the first few days, but the skin rubbed over quickly with warm olive oil and covered with a layer of warm cotton-wool. Its clothing should consist of a woollen vest with long sleeves, a flannel binder, a napkin, and a flannel gown. The cradle should be placed near the fire, in a tent made with a screen and kept at a temperature of 70° F. Well-protected hot-water bottles should be put into the cradle. The baby should be protected from exposure and handled as little as possible; it should be fed and changed in the tent.

2. Proper feeding. Premature children must be fed from birth. Cream and sterile water (1-12), or whey and cream may be given, 2 drachms, every two hours. As soon as the mother's milk is secreted the baby may be put to the breast, but if it is very feeble or cannot suck the breast must be exhausted and the baby fed with a spoon or dropper. On the fourth day, if the baby cannot be breast-fed and it is healthy, it should be fed on modified cow's milk.

3. Premature babies are more liable to convulsions; they therefore need careful watching. Special attention

should be paid to eyes and mouth, and all apparatus used for feeding must be sterilised.

Question.—What are your duties under the Rules of the Central Midwives Board if you have been in contact with a septic case? Are you relieved in any degree from those duties when the doctor has charge of the case.

Answer.—Whenever a midwife has been in attendance, whether as a midwife or nurse, upon a patient, or in contact with a person suffering from puerperal fever, or from any other condition supposed to be infectious, or is herself liable to be a source of infection, she must notify the Local Supervising Authority of the fact, and must (unless the Authority relieve her from that obligation) disinfect herself and all her instruments and other appliances, and have her clothing thoroughly disinfected to the satisfaction of the Local Supervising Authority before going to any other maternity patient.

The midwife is not relieved in any degree from those duties when the doctor has charge of the case. The rule says definitely, "Where she has been in attendance either as midwife or nurse."

Question.—What precautions during labour will you take to prevent infection of the eyes and lids of the infant?

Answer.—As soon as the child's head is born, and if possible before the eyes are opened, its eyelids must be carefully cleansed, using separate swabs of cotton-wool, lint, or rag to clean each eye. The hands of the child must be carefully cleaned and dried, lest it rub its eyes, and so infect them. The child's face must be washed in clean water and not allowed to come in contact with

the water that has been used to wash its body. The midwife must send for medical help in the case of a pregnant woman and in the case of a woman in labour where there is a purulent discharge. If the discharge is discovered for the first time during labour antiseptic douches may be ordered to wash away as much of the discharge as possible. The membranes should not be ruptured, but kept intact as long as possible. As soon as the child is born and the eyelids have been cleansed a drop of 1 per cent. silver nitrate should be instilled into each eye.

Question.—Describe the normal non-pregnant uterus, its position and blood supply. Also describe the more important changes that it undergoes when pregnant.

Answer.—The non-pregnant uterus is a pear-shaped muscular organ about 3 inches in length, 2 inches in breadth, and weighs about 2 ounces. It lies in the pelvic cavity between the bladder and the rectum. It is divided into an upper portion, or body, and a lower portion, the cervix. It contains a cavity, the capacity of which is very small, and is lined with mucous membrane. The internal os is the point where the cervical canal enters the cavity of the body of the uterus. The external os is the opening from the cervix to the vagina. At the upper angles of the uterus are the Fallopian tubes, and the body of the organ which lies between them is called the fundus. The greater part of the uterus is covered with peritoneum, folds of which pass off on either side to form the broad ligaments. The uterus is supplied with blood by the ovarian and uterine arteries, which branch off from the internal iliac arteries, these having received their supply of blood from the descending abdominal aorta. Venous blood flows back from the uterus through

the uterine veins to the iliac veins, and thence into the inferior vena cava.

Changes that the pregnant uterus undergoes are—

1. Size. It enlarges to a great extent, and its weight from 2 ounces increases at full term after the fœtus and placenta are expelled to about 32 ounces. Its cavity increases from 2½ inches to 12 inches in length.

2. Position. At first it is a pelvic organ; at the end of the fourth month it is half-way between the symphysis pubis and umbilicus; at the end of the ninth month it is at the ensiform cartilage.

3. Softening of the cervix. This appears first during the second month of pregnancy, and is due to the œdema caused by the growing ovum pressing on the veins of the cervix. This becomes more marked as pregnancy progresses.

Question.—Describe in detail the management of the third stage of labour.

Answer.—The third stage of labour may be conducted with the patient either in the left lateral or the dorsal position, the latter being more generally used. After the child is born the uterus must be followed down with the left hand and compressed firmly to express the liquor amnii, the hand being kept there to see that good contraction is maintained. If the uterus acts normally it should not be massaged; if, however, it becomes relaxed and distended with clots, and rises to the level or above the umbilicus, it should be gently rubbed and squeezed until it hardens up and contracts properly. Signs that the placenta has been expelled into the vagina are—

(*a*) The uterus rises in the abdomen.

(*b*) It becomes smaller and harder.

(*c*) The cord descends.

(*d*) There may be a small gush of blood.

The uterus should then be grasped and firm pressure made downwards and backwards in the axis of the pelvis, and the placenta received in the right hand, or in a kidney bowl. The weight of the placenta drags the membranes after it; should these hang back, gentle traction in the axis of the outlet will help delivery. The vulva should then be swabbed with an antiseptic solution and a sterile pad applied. After the birth of the placenta it is still important to control the uterus. The placenta and membranes must be carefully examined to see that no portion has been retained.

Question.—How do you recognise syphilis in the pregnant woman? What are the dangers in such a case to yourself, the mother, and the unborn child? What are your duties under these circumstances?

Answer.—I should suspect a pregnant woman was suffering from syphilis if she had sores or ulcerations on the external genitals, or on her mouth, or other parts of her body, accompanied by a rash, or roundish dull red, coppery patches on the limbs or body. If the glands in the groin were swollen, hard, and painful; if she were ill-nourished, hair falling out, and complained of pain in her joints, and sore throat, not very painful, but obstinate and not yielding to ordinary treatment. A previous history of miscarriages, still-born children, or weakly infants would help me to recognise that the patient was probably syphilitic. The dangers to the midwife who has to attend a patient suffering from syphilis are that she may herself become infected or convey the disease to others. To the mother it may be the cause of death,

of life-long invalidism, or of dreadful disfigurement. An infected woman generally miscarries, or if she goes to term the child is born infected. A child born with congenital syphilis usually wastes, digests its food badly, suffers from rashes, and snuffles, and if it survives is likely to become a degenerate. The midwife's duty if she finds a patient with sores on the genitals is to send for a registered medical practitioner and carry out his treatment. She should wear indiarubber gloves, which can be boiled after use, so that she may not infect herself or convey the disease to others. All utensils used by the patient must be kept for her separate use and boiled or disinfected afterwards, and all dressings must be burnt.

Question.—How do you know that the breast milk is sufficient for the baby in quality and quantity? What would you do if the secretion were excessive or insufficient?

Answer.—I should know that the quantity and quality of the mother's milk was sufficient for the child if it increased normally in weight, did not vomit, slept well, and was happy and contented, and if the stools were healthy. For excessive secretion fluid food should be decreased, a mild saline aperient given, a little milk should be drawn off with a breast-pump before giving a feed, and the infant allowed a shorter time than usual. For defective secretion the mother should take plenty of fluid nourishment, eggs, gruel, porridge, cream, milk. If the secretion were still insufficient the baby should have supplementary or alternate feeds of citrated milk-and-water.

Question.—What would make you suspect cancer of the womb? What directions would you give to the patient?

Answer.—Cancer of the womb would be suspected (*a*)

if the patient had irregular hæmorrhages after her periods has ceased, or between her periods; (*b*) if there was any discharge, red, or offensive, or not, after the cessation of her periods; (*c*) if the cervix bleeds on touch; this is usually a sign of cancer; (*d*) if the woman had pain in the pelvis accompanied by discharge: this is usually a late symptom. Women who have any of the above-mentioned signs of cancer of the uterus should be advised to consult at once a properly qualified medical practitioner. If women did this many lives could be saved. If removed early it can frequently be cured, and unless treated early by removal it always ends in death.

Question.—Describe the complete examination which you would make in the case of a woman in advanced pregnancy? Give your reasons.

Answer.—The examination should be made under four heads—(1) *Abdominal;* (2) *Vaginal;* (3) *Breasts;* (4) *Urine.*

1. The patient should lie on her back with her knees drawn up, head and shoulders slightly raised.

(*a*) Inspection. Note the amount of distention, pigmentation, striæ, œdema, rashes, size and shape of uterus, contractions, and movements of child.

(*b*) Palpation. The midwife should stand on the right side of patient, facing her feet; and with both hands on the sides of the uterus press fingers into the brim of the pelvis, the presenting part, the degree of engagement, and some idea of the size can thus be obtained. Then facing the patient's head with her hands over the fundus and sides of uterus she should be able to determine the direction of the back and limbs which would aid her to diagnose the position.

(*c*) Auscultation. The fœtal heart should be listened to and counted. Reasons for making an abdominal examination are that information may be gained as to the size of child, relation of the head to the pelvis, the position whether normal or a malpresentation, if there are twins, hydramnios, or œdema. The condition of the child may be ascertained by listening to and counting the fœtal heart.

2. *Vaginal examination* may be made in advanced pregnancy to ascertain if labour has begun, if there is any dilatation of the cervix, and if there is any bleeding, discharge, or sores.

3. *The breasts and nipples* should be examined and advice given to the patient as to their care, the reason being that the woman may be better able to nurse her baby, and to prevent the danger and discomfort of cracked nipples.

4. *The urine* must be examined so that if albumin is present the patient may be put under medical treatment at once and eclampsia may be prevented.

Question.—Describe the placenta and membranes after expulsion, and your method of examination of them.

Answer.—The placenta after expulsion is seen as an oval, spongy organ, purplish-red in colour. Its weight is about 20 ounces; it is about 8 inches in diameter and 1 inch in thickness. It consists of two portions—(1) Maternal. That portion which before separation was in contact with the uterus. It is rough and is divided by depressions into a number of small areas called cotyledons. The torn edges of numerous blood-vessels can be seen projecting from this surface. (2) Fœtal. That portion which looks towards the fœtus before its birth.

Its smooth and shiny appearance is due to the amnion which covers it, and underneath this can be seen the umbilical vessels radiating from the insertion of the umbilical cord. Attached to the fœtal surface is the umbilical cord.

The membranes consist of the amnion and the chorion, which can be separated as far as the insertion of the cord. The amnion is a smooth, thin, shiny, transparent membrane; it passes over the fœtal surface of the placenta, and forms the outer covering of the cord. The chorion is thicker and more opaque than the amnion, but it is not so tough. It is rough on its outer surface from small pieces of the decidua which adhere to it. It is attached all round to the margin of the placenta, from which it cannot be separated.

For examination the placenta and membranes should be placed in a bowl of clear water and freed from blood-clot. The placenta should be held with the fœtal surface resting in the hollow of the hands, and the maternal surface carefully examined to see if the lobes all fit together properly. If any portion is missing a gap is seen, and the lobe will have a ragged appearance. When examining the membranes the amniotic cavity should be filled with water. This will give a fair idea if any have been retained, or if there is sufficient present to cover the child. The amnion should be separated from the chorion as far as the insertion of the cord, and it should be carefully noted if the chorion is attached all round the edge of the placenta and forms a good sac. Any openings in the membranes should also be carefully examined. In addition to the large opening there may be others, due to pieces of membrane being left behind

in the uterus, or to the retention of a placenta succenturiata.

Question.—What is the common cause of retention of urine after childbirth? How would you deal with it?

Why is it important to know accurately the amount of urine passed in the first twenty-four hours after parturition?

Answer.—The common cause of retention of urine after childbirth is the recumbent position; other causes are muscular fatigue, the difference in the abdominal pressure, and nervousness of the patient.

To remedy this condition simple measures should first be tried, such as pressure on the bladder, hot fomentations, hot water in the slipper. If the woman has had a perfectly uncomplicated labour, tighten her binder and help her either to sit up or to get up on her hands and knees. In this position she can usually pass urine without further trouble. If these methods are unsuccessful a simple warm enema may be given, or a catheter must be passed with all antiseptic precautions.

As a rule the amount of urine excreted is increased for the first two days, and then it gradually falls until it reaches its normal level. The midwife must not be satisfied with the answer that urine has been passed, because in those cases where retention occurs it is not as a rule absolute, and there is generally some overflow, the patient not feeling any inconvenience from the distended bladder. It is therefore important to know the amount of urine passed for the first twenty-four hours, and to know that the patient is emptying her bladder. A full bladder increases the tendency to after-pains, and also

delays involution of the uterus. Stale urine remaining in the bladder may decompose and set up cystitis. Suppression of urine after labour is an indication of grave disease, and this condition could be diagnosed early by measuring the amount of urine passed.

Question.—What are the dangers to the mother and child when the breech presents? How would you endeavour to avoid them?

Answer.—For the mother a breech labour is not more dangerous than a vertex, apart from the danger of a ruptured perineum and from extra manipulation in extraction. For the child it is much more dangerous, due to—

1. Asphyxia, owing to pressure on the cord when head and cord are in the pelvis together.
2. Premature separation of placenta.
3. Premature respiration.
4. Diminished blood supply owing to retraction of uterus.

Injuries to the child are also more common:—

1. Broken limbs or clavicle.
2. Injury to abdominal viscera.
3. Tongue and floor of mouth may be injured during jaw-and-shoulder traction.
4. Wry neck from hæmatoma of sterno-mastoid muscle.
5. Arm may be paralysed by injury to nerves when bringing it down.

If a midwife diagnoses a breech presentation before labour she should send for a medical practitioner, who would perform external version, since the outlook for the child is so much better in cases where the head pre-

sents. She should also satisfy herself that the breech presentation is not due to a contracted pelvis or to any cause likely to result in obstructed labour, and send for medical help in good time.

When the trunk of the child is born it should be covered with a warm cloth to prevent premature inspiration. Good pressure must be kept on the fundus whilst the body is being born, for by so doing flexion of the head and its expulsion are assisted. If there is any delay in the birth of the child's head the midwife must hasten delivery by the Prague, or by the jaw-and-shoulder method. The child should then be held up by its legs in order that any liquor amnii it has imbibed may run out of the air passages, and the mucus cleared away from its mouth and nose with pieces of sterile linen. In every breech case a hot bath should be ready to revive the child if necessary.

Question.—What is your duty in the event of a yellow vaginal discharge being found during labour? What are the dangers of such a condition?

Answer.—If the midwife should find that the patient she has come to attend has a yellow vaginal discharge she must explain that the case is one in which the attendance of a registered medical practitioner is required, and she must hand to the husband or nearest relative or friend present the form for sending for medical help, properly filled up and signed by her, in order that this may be immediately forwarded to the medical practitioner or approved institution. In the meantime she should avoid vaginal examinations and the use of the catheter. The membranes should be kept intact as long as possible. Antiseptic vaginal douches might be

given. The midwife should wear indiarubber gloves for all manipulations.

Dangers to the mother where there is a purulent vaginal discharge at the commencement of labour are—

(*a*) Septic infection of the uterus;

(*b*) Septic infection of the bladder, giving rise to cystitis;

(*c*) Infection of the breasts.

Dangers to the child are—

(*a*) Infection of the eyes, resulting in ophthalmia, and possibly blindness;

(*b*) Infection of the mouth and other mucous membranes.

Question.—Under what circumstances would you consider the second stage of labour to be unduly prolonged? What are the causes of this condition?

Answer.—I should consider the second stage of labour unduly prolonged—

(*a*) If there were good pains and no advance;

(*b*) If with good pains the second stage lasted longer than three hours with a primigravida, or one hour with a multipara, with no sign of delivery;

(*c*) If the second-stage pains were becoming less strong and at longer intervals, showing that the uterus was becoming exhausted;

(*d*) If the general health of the mother was such as to make severe straining in the second stage harmful to her—e.g. heart disease, albuminuria, ante-partum hæmorrhage;

(*e*) If the child showed signs of distress, very rapid or slowing fœtal heart sounds, passing of meconium

in a vertex presentation or weak pulsations of cord in a breech presentation.

Causes of delay in the second stage of labour are—

1. Increased resistance—

(*a*) Contracted pelvis.

(*b*) Abnormality or malposition of child.

(*c*) Unflexed head.

(*d*) Loaded rectum, distended bladder.

(*e*) Rigidity of perineum or vagina, œdema, prolapsed vaginal wall.

(*f*) Too late rupture of the membranes.

2. Weak expelling force.

(*a*) Uterine inertia, primary and secondary.

(*b*) Patient not using her pains.

Question.—What are the causes of sore buttocks in an infant? How would you treat them?

Answer.—The causes of sore buttocks are—

1. Unhealthy fæces, diarrhœa, green, acid and watery stools.

2. Want of cleanliness.

3. Neglect in changing soiled napkins.

4. Congenital syphilis.

5. Use of napkins that have been washed in water containing soda.

As bad nursing and improper feeding account in most cases for sore buttocks the treatment should be to try and prevent them. The baby's mouth and mother's nipples must be kept clean. If the baby is bottle-fed, great care should be taken to give clean milk with clean bottles and teats. The napkins should be changed as soon as they become wet or soiled, and the buttocks washed and thoroughly dried. If the buttocks become

red and sore olive oil must be used in place of water to cleanse them, and a paste made of equal parts of zinc ointment and castor oil applied, or a mixture of lanoline and vaseline. The napkins must be changed frequently to ensure cleanliness, and the ointment should be spread on a piece of lint and applied to the sore area to ensure that the part is kept constantly covered with grease.

Question.—Where is the female bladder situated? What conditions can give rise to incontinence of urine during pregnancy and the puerperium?

Answer.—The female bladder is a pelvic organ situated behind the symphysis pubis and in front of the uterus, its posterior surface being in contact with that organ, and between which there is a small pouch of peritoneum. The lower part is attached to the anterior wall of the vagina. It is connected with the kidneys by the ureters, and opens into the vestibule through the urethra.

Incontinence of urine during pregnancy would be caused by over-distension of the bladder, due to pressure on the neck of the bladder by the cervix of a retroverted uterus, or the presenting part of the fœtus. The bladder becomes so full that at last the pressure of the urine forces open the sphincter for a second or two and a small quantity of urine escapes. A further quantity of urine being secreted, some more escapes, and so on.

Incontinence of urine during the puerperium may result simply from (*a*) retention of urine, due to the unusual recumbent position, muscular fatigue, and the difference in abdominal pressure, the urine dribbling away from

an over-full bladder. (*b*) True incontinence of urine caused by a hole between the bladder and vagina, through which the urine escapes. This condition is due to a tear of the vagina and bladder when the child is extracted with forceps, or to ulceration following the abnormal pressure of the child's head during a prolonged second stage of labour.

Question.—What is meant by pendulous belly? What may be the effect of this on the course of labour, and how is it best dealt with?

Answer.—Pendulous belly is another name for extreme anteversion of the gravid uterus. It is most likely to be met with in the case of a multipara with a contracted pelvis. The anterior abdominal wall tends to become loose in women who have had many children. Where there is some degree of contraction the head of the child does not enter the brim of the pelvis, and when the patient stands up the uterus falls forward over the pubes, so that the front of the fundus may be at a lower level than the centre of the uterus. During labour the uterus acts at a disadvantage, because it pushes the child's head against the promontory of the sacrum instead of into the brim of the pelvis. If the uterus is powerful and allowed to continue to grind the head against the promontory, the uterine wall may be rubbed through at this spot, and dangerous complications ensue. The correct treatment of this condition is to lay the woman on her back, place the child's head over the pelvic brim, and then apply a tight binder. This makes the uterus act in its proper direction. If the pelvis is contracted to such a degree that the midwife is able to recognise it, she should send for a doctor.

Question.—A baby vomits; how would you proceed to investigate the cause, and how would you treat it before obtaining medical aid?

Answer.—The causes which lead to vomiting in babies are:—

1. Over-distension of the stomach.
2. Drinking the milk too quickly.
3. Too much fat in the milk.
4. Too much protein in the milk.
5. Gastro-enteritis.

If a baby increases in weight but vomits, and there are curds in the stools, it is an indication that it is having too much food. Lessen the quantity given. The principal signs of too much fat are regurgitation of some curded milk or watery fluid an hour or so after feeding. Vomiting from this cause can be stopped by drawing off a drachm of milk before the baby is put to the breast. If there is an excess of protein in the milk the vomit will contain hard curds. This usually occurs in artificially-fed babies. Citrate of soda may be added to the feeds in the proportion of 1 grain to the ounce feed, or a weaker mixture of milk-and-water given. The common symptoms of gastro-enteritis are vomiting, colic, green and watery stools. A doctor must be sent for to treat this condition; in the meantime a teaspoonful of equal parts of castor and olive oils may be given, and the baby fed only upon sterile water or albumen water until the stomach and intestines have had time to recover. Five drops of brandy in a little sterile water may be given occasionally.

Question.—A primigravida engages you for her confinement. She is thirty-six weeks pregnant. What

would lead you to suspect the presence of a contracted pelvis, and how would you prove it?

Answer.—I should suspect a contracted pelvis in a primigravida thirty-six weeks pregnant if on examination I found the head of the child presenting and floating above the brim of the pelvis and not engaged, and if I was not able to push it into the brim. Other signs that would make me suspect a contracted pelvis are :—

1. Deformity of the patient, a dwarf, or lame.
2. Exaggerated anteversion of the uterus.
3. Small external measurements.

I should prove my diagnosis by making a vaginal examination and taking the diagonal conjugate. If I could reach the promontory of the sacrum I should know that there must be pelvic contraction, though failure to reach the sacral promontory even with two fingers pressed far would not in every case exclude contraction, since in a generally contracted pelvis the promontory cannot always be palpated in this way.

Question.—How does the abdominal and vaginal examination differ in a case of occipito-posterior presentation?

Answer.—*Abdominal examination.* The forehead may often be felt to the right or left anteriorly; the back of the child is not distinctly felt, as it is lying towards the mother's flank. The limbs are felt anteriorly, and often in the mid-line. The fœtal heart is best heard in the right or left flank below the umbilicus.

Vaginal examination. The anterior fontanelle will be felt to the front, and if the head is well flexed the posterior fontanelle will be felt towards the back, the sagittal suture in the right or left oblique diameter of the pelvis.

Question.—How do you recognise syphilis in the pregnant woman? For what other conditions is it necessary to send for medical help during pregnancy?

Answer.—I should suspect a pregnant woman was suffering from syphilis if she had sores or ulcerations on the external genitals, or on her mouth or other parts of her body, accompanied by a rash or roundish, dull red, coppery patches on the limbs or body. If the glands in the groin were swollen, hard, and painful; if she were ill-nourished, hair falling out, and complained of pain in her joints and sore throat, not very painful, but obstinate and not yielding to ordinary treatment. A previous history of miscarriages, still-born children, or weakly infants would help me to recognise that the patient was probably syphilitic. Other conditions during pregnancy which would make it necessary for the midwife to send for medical aid are in all cases where the woman appears to be dying or is dead: for deformity or stunted growth, loss of blood, abortion or threatened abortion, excessive sickness, puffiness of hands or face, fits or convulsions, dangerous varicose veins, purulent discharge.

Question.—What is meconium, and of what does it consist? If you were to find it in the vagina, what would you think, and what would you do?

Answer.—Meconium is the substance which is passed from the infant's bowels during the first and second days after birth. It is brownish-green in colour, and of a tarry consistency, and is composed of epithelial cells, liquor amnii, mucus, and bile pigment. In vertex cases the passage of meconium accompanied by marked acceleration or definite slowing of the fœtal heart rate is an indica-

tion that the child is suffering from partial asphyxia, and unless delivered quickly there is great danger to its life. In breech cases the passage of meconium is almost normal, being brought about by pressure of the legs upon the abdomen. But if at the same time the fœtal heart rate is either unduly slowed or accelerated, it must be taken as an indication for rapid delivery, and a registered medical practitioner at once sent for.

Question.—Give the main causes of primary post-partum hæmorrhage. What means would you take to avoid this complication, and should it occur, what would you do?

Answer.—Primary post-partum hæmorrhage may be due to:—

1. Imperfect retraction caused by (*a*) morbid adhesion of a partially separated placenta; (*b*) retention of the placenta or blood-clot; (*c*) hour-glass contraction of the uterus; (*d*) placenta prævia.

2. Paralysis of uterine muscle, caused by (*a*) over distension of uterus, as with twins or hydramnios; (*b*) prolonged labour; (*c*) after ante-partum hæmorrhage; (*d*) delivery of the infant in an interval of the pains; (*e*) too rapid delivery of the placenta.

3. Injury to the genital tract.

4. Disease of the blood or blood-vessels. Women who suffer from kidney disease or severe anæmia are more liable to post-partum hæmorrhage.

Many cases of post-partum hæmorrhage may be avoided by good management of labour. An early diagnosis of contracted pelvis, abnormal position of child, over-distension of uterus, and hæmorrhage would enable medical assistance to be obtained in time to lessen the

risk. The second stage of labour should not be allowed to last too long before sending for medical assistance, since prolonged labour exhausts the uterus. Special care should be taken to deliver the placenta properly, and not to express it before it had separated, and to examine it properly after expulsion to ensure that all of it and the membranes had come away. In a case of post-partum hæmorrhage the midwife's duty, after sending for medical assistance, would be to (1) empty the uterus and try and make it contract. She should grasp the uterus, knead up a good contraction, and try and express the placenta. (2) Failing to express the placenta, should the bleeding be severe, she should insert her hand into the uterus and remove it manually. (3) Then give a hot intra-uterine douche. (4) If this does not control the bleeding, do bi-manual compression. As soon as the hæmorrhage is stopped the patient must be treated for shock.

Question.—For what purposes do you use antiseptics during labour and the puerperium? State carefully how you would prepare the different antiseptics, and in what strength you would use them, mentioning any special advantages or disadvantages each may possess for the different purposes.

Answer.—For the proper and safe conduct of labour and for the prevention of septic infection, both in labour and the puerperium, the midwife must as far as she is able destroy any bacteria, that may be present on the patient's skin, her own hands, or on any instruments, dressings, or bedclothes that may be brought in contact with the patient's genital organs, and for this reason antiseptics are used where other forms of sterilisation, such as dry heat or boiling, cannot be carried out. (*a*) Per-

chloride of mercury is a rapid and effective germicide, and in a solid form is convenient and easy to prepare; one soloid in a pint of water makes a solution of 1-1000. This strength may be used for the midwife's hands, and also for sponging the patient. For douching 1-4000, i.e. one soloid to 4 pints of water, will be found strong enough, and this should be followed by a douche of boiled water to wash away any mercury that is left behind. Its disadvantages are that it is poisonous; it corrodes metal and therefore must not be used for instruments; it is incompatible with soap, albumin, and salt; it roughens the skin and dries up the tissues. (*b*) Carbolic acid, a useful and effective germicide, may be used for instruments and cleaning purposes at a strength of 1-20. For the hands and patient's skin 1-40. To prepare a solution of 1-20 take 1 ounce of carbolic acid and make up to 1 pint with boiling water. It does not affect metals, and it does not combine with albumin, so can be used when this substance is present. It is poisonous and makes the skin very rough. (*c*) Lysol, a preparation of carbolic acid, but not so poisonous. It is made up with soap, and therefore acts as a good lubricant. It may be used for sponging the external parts and for douching. To prepare a solution of 1-160 take a drachm of lysol and add sterile water up to a pint. (*d*) Tincture of iodine, a very efficient antiseptic, much used for painting on areas in the operation neighbourhood, must be applied to the dry skin for its use to be effective. Makes a good antiseptic douche at the strength of 1 drachm to 1 pint of sterile water.

Question.—Give the mechanism of the third position of the vertex presentation.

Answer.—The long diameter of the head enters the pelvis in the right oblique diameter, with the occiput towards the right sacro-iliac joint. The head descends with increased flexion, the occiput meeting the resistance of the pelvic floor, rotates forward three-eighths of a circle under the pubic arch. The force of the uterus acting on the fore part of the head drives forehead and face over the perineum, and the head is born by extension. By a movement of restitution the occiput then turns to the right. The shoulders, which have tended to come round with the long rotation of the occiput, now meet with the resistance of the pelvic floor. The left shoulder rotates forward under the pubic arch, the right shoulder passes over the perineum, and the shoulders are born, quickly followed by the trunk and limbs. In a few cases, where flexion is deficient, when the head descends the forehead first meets the resistance of the pelvic floor and rotates forward one-eighth of a circle under the pubic arch, the occiput rotating backwards into the hollow of the sacrum. The force of the uterus drives the occiput over the perineum, and the head is born by extreme flexion. By a slight movement of extension the forehead and face slip from behind the pubes and the head is born.

Question.—What would lead you to suppose that breast-feeding was not going on satisfactorily? How would you proceed to find out the reason? What means could be taken to improve or correct unsatisfactory breast-feeding?

Answer.—Signs that a baby is not thriving are (1) steady loss in weight; (2) want of appetite, refusal to take the breast; (3) restlessness and want of sleep; (4) digestive disturbances—i.e. vomiting, diarrhœa, colic,

green stools. The causes may be ascertained by careful observation of baby and mother. If the mother's secretion is defective she must take plenty of fluid nourishment, eggs, gruel, porridge, and cream, and if still scanty the baby should have one or two supplementary feeds of citrated milk and water. The baby may not be getting sufficient from the breast because the nipples are retracted or because it cannot suck properly owing to hare lip, cleft palate, facial paralysis, or because it is a sleepy baby, or it may be too weak and feeble to suck properly. It is a good plan to weigh the baby before and after it goes to the breast, and if it has not had sufficient to exhaust the milk and feed it with a spoon or bottle. For sleeplessness and digestive troubles a doctor should be consulted, but the nurse should satisfy herself that the trouble is not due to any infection from dirty nipples or because the child's mouth has not been kept clean.

Question.—Under what conditions might you require to use a catheter during labour? What are the objections to its use?

Answer.—It might be necessary to pass a catheter during labour under the following conditions: (*a*) If the bladder is distended in the first or second stage, and the patient cannot pass urine naturally, all simple measures to induce the same failing. (*b*) If the bladder is distended in the third stage, otherwise there may be post-partum hæmorrhage. (*c*) Before the application of forceps, version, introduction of bougies or dilating bags, perineal suture. (*d*) If albuminuria is suspected a specimen should be drawn off for testing purposes. (*e*) If the patient has fits. Objections to the use of the catheter are that unless the greatest care is taken there is

danger of infecting the bladder and so producing cystitis.

Question.—How would you recognise a breech presentation? Give your methods of managing a normal breech case throughout, giving your reasons for each successive step you take.

Answer.—A breech presentation would be recognised: 1. By abdominal palpation. The hard, resistant head is not felt in the pelvis, but a more indefinite mass (the pelvis of the infant). The back of the child is, as a rule, easily defined. On palpating the fundus the hard globular head will be felt, which can be moved to and fro independently of the trunk. The fœtal heart is best heard through the back of the child at or above the level of the umbilicus.

2. By vaginal examination. The presenting part is usually high, and the bag of membranes, if unruptured, may be elongated. After rupture of the membranes the anus is felt, with the cleft between the buttocks; the sacrum, the coccyx, and the genital organs are felt, and the examining finger, when withdrawn, may be stained with meconium.

Management.—Keep the membranes intact as long as possible; therefore keep the patient on the bed and avoid frequent vaginal examinations. As long as the membranes remain unruptured there is no danger to the child. When the membranes rupture a vaginal examination must be made to ascertain if the cord has prolapsed. The fœtal heart must be listened for and counted at frequent intervals to make sure that the child is not getting distressed. The bladder must be kept empty; a full bladder tends to delay labour. The patient may

be delivered in the dorsal or left lateral position. When the buttocks are born cover them with a warm sterile towel to prevent cold air striking upon the child and causing it to take a premature inspiration. Draw down a loop of cord to prevent it being unduly stretched, and watch the pulsations in it. If normal, wait for the shoulders to be born; then grasp the child by the pelvis, rotate the occiput under the pubic arch and carry the body forward as the head is born, keeping good suprapubic pressure with the other hand, or instruct an assistant to do this. The pressure assists flexion and expulsion of the head. A warm bath should be prepared beforehand, with warm wool and brandy, in case the child should be asphyxiated at birth.

Question.—What are the causes of ante-partum hæmorrhage occurring after the seventh month of pregnancy? What treatment can you carry out in such a case until the doctor arrives?

Answer.—Ante-partum hæmorrhage occurring after the seventh month of pregnancy is due in the case of (1) accidental hæmorrhage to the separation, partial or complete, of a normally situated placenta. Predisposing causes are: (*a*) Shock or emotion, causing a sudden violent contraction of the uterus; (*b*) disease of uterus or placenta; (*c*) some disease of the mother that favours bleeding—i.e. kidney disease, syphilis. (2) Unavoidable hæmorrhage due to the partial or complete separation of an abnormally situated placenta. Cause of the bleeding is that the placenta or some portion of it is situated in the lower uterine segment. When this becomes stretched to allow the child to be born, the placenta, being inelastic,

is unable to take part in the stretching, and therefore becomes separated.

Treatment.—I should fill in the form for sending for a registered medical practitioner and hand it to the nearest relative to send, explaining that it was a case that a midwife might not attend alone. The woman should be put to bed, kept as quiet as possible, temperature and pulse taken and charted; she should be kept warm with blankets and well-protected hot bottles and hot drinks if she could take them. Her head should be kept low and the foot of the bed raised. If the bleeding continued, the patient's condition became grave, and the doctor delayed, I should do my best to hasten on labour. If the os was well dilated, the uterus contracting, and presentation normal, I should rupture the membranes and apply a tight binder. If the child was presenting by the breech and the bleeding was due to placenta prævia, I would pull down a leg; the half-breech would plug the lower uterine segment and control the bleeding. If the cervix was not dilated, I would give a hot vaginal douche, pass a catheter, plug the vagina, and apply a tight binder.

Question.—How would you artificially feed an infant from birth? and how would you satisfy yourself that the means adopted were satisfactory?

Answer.—A normal healthy baby would be fed on cow's milk diluted with water, to which a little cream and lactose had been added. On the first day it might be given one part milk to four parts water, or one part cream to eleven parts water—one tablespoonful every six hours. By the fourth day it would take one part milk to two parts water—1 ounce every 2 hours by day

and every 4 hours by night. By the tenth day the same strength of milk and water, but the amount increased to 1½ ounce every three hours by day and four hours by night. At the end of the fourth week the child should be taking 2½ ounces to 3 ounces every three hours and one feed at night, and after that the amount and strength of the food gradually increased, this being determined by the progress of the baby. At the sixth month a healthy baby could take undiluted milk. Citrate of soda added to the milk mixture in the proportion of 2 grs. to the ounce of milk tends to make the curds of the cow's caseinogen more easily digested, and if cow's milk is citrated a stronger mixture can be given. To prepare the feeds use a Soxhlets apparatus, which consists of a saucepan and frame containing ten glass bottles, each holding the amount for one feed. The milk must be fresh and clean. Dilute it with clean boiled water, and add cream and lactose in the proportion of one teaspoonful to every 3 ounces of mixture. The bottles should be filled with the amount required for each feed, and a rubber cap applied, then put into the saucepan, the water reaching three-quarters of the way up the bottles. The water should be boiled for 30 minutes, then the bottles lifted out and set to cool quickly. When the child is to be fed the cap is taken off one of the bottles, a sterile rubber teat applied, and the milk warmed to 100° F. I should satisfy myself that the means adopted were satisfactory if the child increased normally in weight, did not vomit, if the stools were healthy and did not contain undigested food, if it slept well, and was happy and contented.

Question.—What are the causes of sapræmia? What

symptoms would lead you to suspect a patient was suffering from this trouble?

Answer.—Sapræmia is septic infection due to the absorption into the blood of the chemical products of decomposition. It is caused by germs which live only on dead tissue and set up putrefaction of that dead tissue, such as retained membrane, placenta, or blood clot; or the lochia may be pent up, and germs being present that may putrefy; or the woman may absorb toxins from the sloughing surfaces of lacerations. Symptoms of sapræmia are: Gradual rise of temperature; quickened pulse; frontal headache; tenderness of the uterus; offensive and profuse lochia; sub-involution of the uterus.

Question.—Describe the exact treatment of the umbilical cord. What trouble may arise if careful treatment is not carried out?

Answer.—The cord should not be tied and separated until the pulsations have ceased. The midwife's hands must be thoroughly washed and disinfected; the ligature must be sterile, and the cord tied 1½ inch from the umbilicus with a reef knot; a second ligature should be applied about 1 inch from the first towards the placenta, and the cord cut between the two with sterile scissors, the points of which must be protected. Squeeze all blood from the cut end and apply a sterile dressing. After the first bath the cord must be re-ligatured and kept quite dry, turned upwards, and powdered freely with a dusting-powder of starch and boracic acid. Apply a sterile dressing, which must be kept in place with a flannel binder. It must be watched carefully for a time for oozing or bleeding. It must be dressed daily with antiseptic precautions, and should separate about the

fifth day. Care must still be taken of the umbilicus, and a sterile dressing kept over it. Troubles which may arise if careful treatment is not carried out are: (1) Sepsis, sloughing, and suppuration, erysipelas, malignant jaundice, tetanus; (2) hæmorrhage, with death of child; (3) umbilical hernia.

Question.—What do you consider are your duties to your patient during her pregnancy? What dangers may arise if the patient is not seen during this time?

Answer.—When engaged to attend a labour, the midwife must interview her patient at the earliest opportunity to inquire as to the course of the previous pregnancies, confinements, and puerperia, both as regards mother and child, and to advise as to personal and general arrangements for the confinement, and, with the consent of the patient, visit the house.

Whenever illness or abnormality has occurred in the previous pregnancy, and whenever the previous pregnancy has ended in an abortion, a premature labour, or a still-birth, the midwife, on being engaged to attend the patient in her next confinement should explain that the case is one in which skilled medical advice is required, and should urge the patient to seek advice from her medical attendant, or at a hospital or other suitable institution.

The midwife must fill up and sign the form of sending for medical help and hand it to the husband or nearest relative, to be immediately forwarded to the medical practitioner or approved institution (1) in all cases of illness of the patient or where she appears to be dying or is dead. (2) Where there is deformity or stunted growth, this may indicate contraction of the pelvis and

lead to obstructed labour. (3) Loss of blood. This in the later months of pregnancy is almost always due to some separation of the placenta, and if not treated may result in death of mother and child. (4) Abortion or threatened abortion. (5) Excessive sickness, puffiness of hands and face, fits or convulsions. These all indicate a serious condition which, if not properly treated, may develop into eclampsia. (6) Dangerous varicose veins. These may rupture during labour and delivery, and cause serious hæmorrhage. (7) Purulent discharge and sores of the genitals. These are symptoms of venereal disease, and if not treated may lead to sepsis in the mother and to ophthalmia and ultimate blindness in the child.

In the case of a primigravida, the midwife should test her urine for albumin frequently in the latter months of pregnancy, and she should examine her patient during the last month to satisfy herself as to the position of the child and the relation of the head to the pelvis.

Question.—Describe the placenta and membranes at term, and give an account of the way in which hæmorrhage is naturally arrested after labour.

Answer.—The placenta at term is an oval, spongy organ, purplish-red in colour. Its weight is about 20 ounces; it is about 8 inches in diameter and 1 inch in thickness. It consists of two portions: (1) Maternal. That portion which before separation was in contact with the uterus. It is rough, and is divided by depressions into a number of small areas called cotyledons. The torn edges of numerous blood-vessels can be seen projecting from this surface. (2) Fœtal. That portion which looks towards the fœtus before its birth. Its smooth and shiny

appearance is due to the amnion which covers it, and underneath this can be seen the umbilical vessels radiating from the insertion of the umbilical cord. Attached to the fœtal surface is the umbilical cord. The membranes consist of the amnion and the chorion, which can be separated as far as the insertion of the cord. The amnion is a smooth, thin, shiny, transparent membrane; it passes over the fœtal surface of the placenta and forms the outer covering of the cord. The chorion is thicker and more opaque than the amnion, but is not so tough. It is rough on its outer surface from small pieces of the decidua which adhere to it. It is attached all round to the margin of the placenta, from which it cannot be separated. Hæmorrhage is naturally arrested after labour by (1) retraction. This property of the uterine muscle compresses the sinuses when the uterus is relaxing for a further supply of blood. (2) Kinking of the blood-vessels. The uterine arteries in their course along the sides of the uterus and through its muscle assume a corkscrew shape. The uterine veins are zigzag in shape. When the uterus is contracting, the length of the arteries is considerably reduced, and numerous kinks are produced in them, with the result that the flow of blood is almost stopped. By the same contraction the angles of the zigzags in the veins are made more acute, which prevents the venous blood flowing back into the uterus. (3) Clotting in the blood-sinuses. Owing to the blood almost ceasing to flow in the vessels of the placental site, clotting takes place, and serves as an additional means of preventing bleeding.

Question.—How would you recognise an occipito-

posterior presentation? Describe the mechanisms by which natural delivery may be effected. What symptoms and signs would lead you to advise medical help in such a case?

Answer.—An occipito-posterior presentation would be recognised by (*a*) abdominal palpitation. If the head is engaged in the pelvic brim, the forehead may often be felt to the right or left anteriorly. The back of the child is not always distinctly felt, as it is lying towards the mother's flank. The limbs are definitely to the front, and often in the middle line. The fœtal heart is best heard in the right or left flank below the umbilicus. (*b*) Vaginal examination. The anterior fontanelle will be felt to the front, and if the head is well flexed the posterior fontanelle will be felt towards the back—the sagittal suture in the right or left oblique. In normal cases, if the head is well flexed, the occiput touches the pelvic floor first, makes a long rotation forward, and passes under the pubic arch. Extension then brings forehead and face over the perineum, the vulval orifice being stretched by the sub-occipito frontal diameter. In certain cases, where flexion is deficient, the forehead first comes in contact with the pelvic floor and rotates forward, the occiput rotating backwards into the hollow of the sacrum. If uterine contractions are good, vertex and occiput are driven over the perineum and the head is born by flexion, the occipito-frontal diameter stretching the vulval outlet. Medical help should be sent for if there be any hæmorrhage; rising temperature and quickened pulse; if there were good pains with no advance of presenting part; if the pains were getting weak, showing that the uterus was becom-

ing exhausted; if the child was passing meconium, or the fœtal heart was becoming weak; if the anterior fontanelle alone could be felt towards the front, for this would show that the head was badly flexed and that difficulty and delay would result.

Question.—Describe your method of abdominal examination of a patient at full term, and give an account of the information to be gained therefrom.

Answer.—The patient should lie on her back, with the knees drawn up; head and shoulders slightly raised. The examination consists of three steps: (1) Inspection. Note the abdomen, amount of distension, pigmentation, striæ, protrusion of the umbilicus, œdema, rashes, old scars, size and shape of the uterus, contractions, movements of the child, the bladder if distended. (2) Palpation. The midwife should stand on the right side of the patient, facing her feet, and lay both hands (which should be warm) on the sides of the uterus, with finger-tips pointing downwards, and press them into the brim of the pelvis; the presenting part, the degree of engagement, and some idea of the size may thus be obtained. She should then face the patient's head, with her hands over the fundus and sides of the uterus, and determine the direction of the back, which offers the greatest resistance; the limbs are felt as irregular projections, and movements can often be felt which aid diagnosis of position. (3) Auscultation. The fœtal heart must be listened to and counted. Other sounds which may be heard are the pulsations in the maternal arteries, the uterine souffle, the funic souffle, and intestinal sounds. Information which may be gained from this examination is—the size of the child; the relation of the head to the

pelvis; the position, whether normal or a malpresentation; if there are twins; hydramnios or œdema. The condition of the child may be ascertained by listening to and counting the fœtal heart sounds.

Question.—Give the signs that would make you think that a patient about to be confined was suffering from venereal disease.

Answer.—Signs that a patient was suffering from venereal disease would be: (*a*) A purulent discharge from the vagina, greenish-yellow in colour, with redness, swelling, and irritation round the orifice of the urethra. (*b*) Sores or ulcerations of the external genitals; glands in the groin. (*c*) Rash. This is not raised above the surface of the skin, and occurs in roundish, dull red or coppery patches on the body and limbs. (*d*) Sore throat that is very obstinate and does not get well under ordinary treatment. (*e*) The patient is ill-nourished, hair falls out, and she may complain of pain in her joints.

Question.—Give an account of your duties to the mother and child immediately after the delivery is completed. What instructions would you leave on your departure?

Answer.—(1) The mother: The uterus, which has been followed down with the left hand during delivery of the child, must be carefully watched. It will be felt to contract and relax alternately; if it does not harden up properly it should be gently rubbed and squeezed until it does so. When the placenta has left the uterus the delivery from the vagina may be aided during a contraction by firm pressure in the axis of the genital canal. It should be received in a kidney tray, and carefully

examined to make sure that no portion of it or the membranes has been left behind. The vulva should then be cleansed with an antiseptic lotion and the perineum carefully examined in a good light for any lacerations. A dry sterile pad should be applied and an abdominal binder adjusted. All soiled linen, blood, fæces, urine, placenta, and membranes must be removed from the neighbourhood of the patient and from the lying-in room as soon as possible after labour. The midwife should not leave the patient whilst the pulse is above 100 or if the uterus is not contracting well, and in any case not for an hour after labour. (2) The child: As soon as the head is born, and, if possible, before the eyes are opened, the eyelids must be carefully cleansed. The cord should not be separated until it has ceased to pulsate; it should then be ligatured about 3 inches from the umbilicus with sterile thread and cut with sterile scissors, the cut end being carefully examined to see that there is no bleeding, and wrapped in a piece of sterile gauze. After the child is bathed the cord must be re-ligatured and dressed with gauze and powdered with boric-acid powder, the dressing being kept on with a flannel binder. It should be dressed, wrapped in a blanket, and put to sleep in a cradle. Before leaving the midwife must give all necessary directions for securing the comfort and proper dieting of mother and child. She must leave instructions that, should there be any bleeding other than normal, or should the patient appear ill, she must at once be sent for. The baby's cord must be watched that no bleeding is taking place. Notice must be taken if it passes urine and meconium. The baby should be put ot the breast for a few minutes after the mother has had a rest.

Question.—Give the reasons which may prevent a mother from nursing her baby. What is your duty in such a case?

Answer.—A mother should not nurse her baby if she is suffering from tuberculosis, syphilis, rheumatism, sepsis, severe cardiac or renal disease, bad anæmia, inflammation or abscess of the breast, badly formed or cracked nipples. The child may not be able to suck if it has cleft palate, hare lip, thrush, or facial paralysis, or if it is premature or very feeble. In cases where the mother is unable to nurse her baby, it is the duty of the midwife to fill up the form of notification of artificial feeding, sign it, and send it to the Local Supervising Authority.

Question.—What are the chief constituents of human milk? What changes do they undergo during the passage from the mouth to the rectum?

Answer.—The chief constituents of human milk are proteins, fat, lactose, salts, and water. The proteins are caseinogen and lactalbumin. The milk passes into the baby's stomach from the mouth unchanged. The caseinogen is there acted upon by rennin and converted into clot, and partly digested. The lactalbumin is not precipitated and is easily digested. The changed milk then passes into the small intestine, where the *semi-digested* proteins are acted upon by the juices from the pancreas and the glands of the intestines. The bile from the liver emulsifies the fat. The sugar-of-milk is not further converted. The liquid is most of it absorbed by the large intestine and passes into the blood stream; the waste products and undigested food form the stools which are excreted at the anus.

Question.—How do you ascertain that the breech is presenting? What difficulties may arise in the course of delivery in such a case?

Answer.—*Diagnosis:* (1) Abdominal palpation: The finger-tips pressed into the pelvis do not meet with the hard resistant head, but come in contact with the more indefinite pelvis of the infant. The back of the child is, as a rule, easily defined. Palpation of the fundus reveals the presence in it of the hard, globular head, which can be moved to and fro independently of the trunk. The fœtal heart is best heard through the back of the child, at or above the level of the umbilicus. (2) Vaginal examination: The presenting part is usually high, and the bag of membranes, if unruptured, may be elongated. After rupture of the membranes the tuberosities of the ischium may be felt, the buttocks with the cleft between, the sacrum and coccyx, the genital organs, and when the examining finger is withdrawn it may be stained with meconium.

Difficulties that may arise: (1) Early rupture of the membranes, causing long and tedious labour. (2) Presentation and prolapse of cord. (3) Threatened intra-uterine asphyxia. (4) Delay in descent. (5) Extended legs. (6) Extended arms. (7) Delay of after-coming head. (8) Asphyxia of child. (9) Rupture of perineum in delivering after-coming head without delay.

Question.—What is cystitis? How does it arise? How would you recognise it?

Answer.—Cystitis is inflammation of the bladder, due to infection by micro-organisms. The most common cause is carelessness in not observing strict surgical cleanliness in passing the catheter. The symptoms to

which it would give rise are: (*a*) Frequent painful passage of small quantities of scalding urine. (*b*) Pain and tenderness over the pubes. (*c*) Rise of temperature, with accompanying malaise. (*d*) The urine is alkaline in reaction, contains pus, and is cloudy and offensive.

Question.—Describe in detail the management of the third stage of labour, stating the reasons for what you do.

Answer.—The third stage of labour may be conducted with the patient either in the left lateral or the dorsal position, the latter being more generally used. After the child is born, the uterus must be followed down with the left hand and compressed firmly to express the liquor amnii, the hand being kept there to see that good contraction is maintained. If the uterus acts normally, it should not be massaged; if, however, it becomes relaxed and distended with clots, and rises to the level or above the umbilicus, it should be gently rubbed and squeezed until it hardens up and contracts properly. Signs that the placenta has been expelled into the vagina are (*a*) the uterus rises in the abdomen; (*b*) it becomes smaller and harder; (*c*) the cord descends; (*d*) there may be a small gush of blood.

The uterus should then be grasped and firm pressure made downwards and backwards in the axis of the pelvis, and the placenta received in the right hand or in a kidney bowl. The weight of the placenta drags the membranes after it; should these hang back, gentle traction in the axis of the outlet will help delivery. The vulva should then be swabbed with an antiseptic solution and a sterile pad applied. After the birth of the placenta it is still important to control the uterus.

The placenta and membranes must be carefully examined to see that no portion has been retained.

Question.—Describe the separation of the umbilical cord, and your management of it. What complications may arise in connection with this process?

Answer.—The umbilical cord, as a rule, separates about the fifth day by a process of mummification. It separates spontaneously, leaving a small clean ulcer, which cicatrices rapidly. The cord should not be tied and separated until pulsations have ceased. The midwife's hands must be thoroughly washed and disinfected; the ligature must be sterile, and the cord tied 1½ inch from the umbilicus with a reef knot; a second ligature should be applied about 1 inch from the first, towards the placenta, and the cord cut between the two with sterile scissors; squeeze all blood from the cut end, and apply a sterile gauze dressing. After the first bath the cord must be re-ligatured and kept quite dry, turned upwards, and powdered freely with a dusting powder of starch and boracic acid. A sterile dressing must be applied, and kept in place with a flannel binder. It must be watched carefully for a time for bleeding. It should be dressed daily with antiseptic precautions.

Complications which may arise are (1) sepsis, sloughing and suppuration, erysipelas, malignant jaundice, tetanus; (2) hæmorrhage, with death of child; (3) umbilical hernia.

Question.—Give some of the most important conditions in which you must advise that a doctor be summoned after labour is completed.

Answer.—The midwife must advise that a doctor be summoned after labour in all cases in which the woman

appears to be dying or is dead, or when there is any abnormality or complication, such as fits or convulsions, abdominal swelling and tenderness, offensive lochia (if persistent), rigor with raised temperature, rise of temperature above 100° F. with quickening of the pulse for more than twenty-four hours, unusual swelling of the breasts with local tenderness or pain, secondary post-partum hæmorrhage, white leg.

Question.—Describe the uterus and its blood supply. Draw a diagram if you are able?

Answer.—The non-pregnant uterus is a pear-shaped muscular organ about 3 inches in length, 2 inches in breadth, and weighing about 2 ounces. It is flattened from before backwards. It is divided into an upper portion, or body, and a lower portion, the cervix. It contains a cavity, the capacity of which is very small, and is lined with mucous membrane. The internal os is the point where the cervical canal enters the cavity of the body of the uterus. The external os is the opening from the cervix to the vagina. At the upper angles of the uterus are the Fallopian tubes, and the body of the organ which lies between them is called the fundus. The greater part of the uterus is covered with peritoneum, folds of which pass off on either side to form the broad ligaments. The uterus is supplied with blood by the ovarian and uterine arteries, which branch off from the internal iliac arteries, these having received their supply of blood from the descending abdominal aorta. Venous blood flows back from the uterus through the uterine veins to the iliac veins, and thence into the inferior vena cava. There are spaces between the muscle fibres of the pregnant uterus, through which blood circulates.

Question.—(*a*) Describe the physiological processes of respiration. (*b*) A child is born dead after a labour complicated by placenta prævia. Describe the colour and general appearance of the child and give the reasons for its death?

Answer.—(*a*) Respiration may be defined as the process by which oxygen is absorbed by the blood through the medium of the lungs and skin; while carbonic acid, water, and urea are simultaneously excreted. It is the result of the alternate expansion and contraction of the walls of the chest. In inspiration the cavity of the chest is enlarged by the contraction of the diaphragm and the external intercostal muscles. This tends to produce a vacuum between the lungs and the chest, and as a natural result the air rushes in through the trachea, causing the lungs to expand with the chest, and in this way oxygen reaches the lungs. When these muscles cease to contract the elasticity of the lungs causes those organs to return to their former volume. The walls of the chest follow the lungs, and the air taken in is expelled again through the trachea, but with the difference that it contains less oxygen and more carbonic acid. This movement is called expiration. The internal intercostal muscles depress the ribs, thus making the chest narrower and assisting respiration. The air passages which connect the interior of the air sacs of the lungs with the outside air are the nose, pharynx, larynx, trachea, main bronchi, and bronchial tubes. (*b*) A child born dead after a labour complicated by placenta prævia would be white in colour; limbs would be flaccid from complete loss of muscular tone, eyes closed, umbilical cord pulseless, and sphincters relaxed. Cause of death. (1)

Suffocation due to the diminished supply of oxygen owing to the separation of the placenta. (2) Injury to the respiratory centre of the brain from excess of carbonic acid owing to the same reason.

Question.—What inquiries (1) and observations (2) would you make of a woman who engages you to attend her in her confinement?

Answer.—(1) Inquiries that a midwife would make of the woman she was engaged to attend would be: (*a*) General health of patient, whether she had had previous serious illness, such as kidney disease, rheumatism, chorea, or fits. (*b*) Her former pregnancies and labours, if any; number of children, and if any miscarriages. (*c*) Her health during the present pregnancy, if complicated by any loss of blood, purulent discharge, or sores, headache, failure of eyesight, excessive sickness, scanty urine, swelling of hands and feet, troublesome constipation. (2) Observations that the midwife would make: (*a*) The appearance of the woman, whether she looked ill or not, whether smaller than normal, deformed, or lame. (*b*) Size and shape of the uterus, and whether the abdomen was pendulous. The relation of the child's head to the pelvis. (*c*) External parts: varicose veins, sores, rashes, old abdominal scars, swelling and œdema of face, body, and limbs. (*d*) The breasts and nipples should be seen, and advice given as to their care. (*e*) The urine should be examined periodically for albumin.

Question.—A woman sent for you on account of hæmorrhage in the seventh month of pregnancy. Explain exactly what you would do?

Answer.—I should fill in the form for sending for a registered medical practitioner and hand it to the nearest

relative to be sent, explaining that it was a case that a midwife might not attend alone. Then I should put the patient to bed, keep her as quiet as possible, take the temperature, pulse, and respiration, and chart them. I should then make a careful diagnosis after abdominal and vaginal examination. If the patient's general condition was good and the hæmorrhage not severe I should await the arrival of the doctor, in the meantime keeping her warm with hot blankets and well-protected hot bottles and drinks if she could take them. If she was inclined to vomit I would give a normal saline injection by the rectum. I should raise the foot of the bed and keep her head low. If the bleeding continued, the patient's condition became grave, and the doctor was delayed, I should do my best to hasten on labour. If the os was well dilated, the uterus contracting, and presentation normal, I should rupture the membranes and apply a tight binder, and if there was no likelihood of any obstruction give a dose of ergot. If the child was presenting by the breech and the bleeding was due to placenta prævia I would pull down a leg; the half breech would plug the lower uterine segment and control the bleeding. If the cervix was not dilated I would give a hot vaginal douche, pass a catheter, plug the vagina, and then apply a tight binder.

Question.—Describe in detail how you would manage a normal breech labour? (The third stage of labour is not included in the question.)

Answer.—Keep the membranes intact as long as possible; therefore the patient should be kept at rest in bed and frequent vaginal examinations should be avoided. When the membranes rupture a vaginal examination

should be made to see if the cord has prolapsed. The fœtal heart sounds must be listened for and counted at frequent intervals. The bladder must be kept empty. For delivery it is better to put the patient in the dorsal position with the feet supported on two chairs. Leave it as far as possible to nature until the child is born to the umbilicus. Cover the breech with a warm sterile towel. Draw down a loop of the cord, and if it is pulsating normally wait for the shoulders to be born. Then grasp the child by the pelvis, rotate the occiput under the pubic arch, and carry the body forward as the head is born keeping good supra-pubic pressure with the other hand. A warm bath should be prepared beforehand, with warm wool and brandy in case the child should be asphyxiated at birth.

Question.—What are the duties of the midwife, as laid down by the Rules of the Central Midwives Board, with regard to the care of the eyes of the child?

Answer.—Medical help must be sent for in the case of a pregnant woman, and in the case of a woman in labour, where there is a purulent discharge. As soon as the child's head is born, and if possible before the eyes are opened, the eyelids must be carefully cleansed. The midwife should (*a*) use separate swabs of cotton wool, lint, or rag to clean each eye, since the swab used for the first eye may be contaminated and so if used for the second eye may infect it. (*b*) Be careful to clean and dry the hands of the child, because children often rub their eyes with their hands, and if discharges are on them they will infect their eyes. (*c*) Wash the child's face in clean water. When the baby is bathed the discharges with which its body is covered during labour are washed off

into the bath-water. If its face is washed in this water matter may get into the eyes. Medical help must be sent for in the case of the child where there is inflammation of, or discharge from, the eyes, however slight.

Question.—Describe the sutures and fontanelles of the fœtal head. How may they be recognised during labour? What circumstances may make it difficult to recognise them?

Answer.—The sutures are pieces of membrane which join together the bones of the fœtal head. They are the

Sagittal suture, uniting the two parietal bones;

Frontal suture, uniting the two frontal bones;

Coronal suture, uniting the two frontals to the two parietals.

Lambdoidal suture, uniting the occipital bone to the parietals.

The fontanelles are the irregular membranous spaces where the different sutures converge. The two principal ones are termed the anterior and posterior fontanelles.

The anterior fontanelle or bregma is formed by the junction of the frontal, sagittal and two coronal sutures. It is the larger of the two, is lozenge-shaped and is always patent at birth. It would be recognised during labour by tracing the four sutures into it, but in most cases it is out of reach, and when it can be felt it is an indication that the head is not well flexed, or may be extending.

The posterior fontanelle is formed by the junction of the sagittal and two lambdoidal sutures. It is triangular in shape, and cannot be felt as a space during birth. It would be recognised during labour by tracing the three sutures into it.

It is often difficult to make out the position of the sutures and fontanelles where, on account of prolonged labour, there is much moulding of the head and development of the caput succedaneum.

Question.—Describe the symptoms of shock following severe post-partum hæmorrhage. Give in detail your treatment in the absence of a doctor.

Answer.—After severe post-partum hæmorrhage the symptoms of shock would be: marked pallor of the skin and mucous membranes, expression drawn and exhausted, skin cold and clammy, with cold sweats, respirations hurried and of a sighing character, and showing marked symptoms of air hunger; temperature subnormal and pulse rapid, small and feeble. There might be nausea and vomiting, dimness of vision, and giddiness.

Treatment.—The most urgent need of the patient is fluid to replace the blood lost and to prevent heart failure. It may be given by mouth in the form of water, milk, coffee, tea; but if the patient vomits, only sips of water should be given, and one to two pints of normal saline at temp. 105° given per rectum. This should be given slowly by means of a long rubber catheter, tubing and funnel. The legs may be tightly bandaged from below upwards to preserve the blood for the upper part of the body and more vital organs. The patient should be wrapped in warm blankets, surrounded by well-protected hot-water bottles. Pillows should be removed from the head, and the foot of the bed raised. She should be kept absolutely quiet and at rest, and given as much fresh air as possible.

Question.—If ordered to give a douche on the third day after delivery, describe in detail how you would do this.

What apparatus would you use, and what fluids would be suitable?

Answer.—The apparatus used should be a glass or enamel douche can, india-rubber tubing, and a glass nozzle, all of which should be previously boiled. The lotion to be given should be prepared at a temperature of 110° F. or at the heat ordered, and placed in readiness by the patient's bedside, with a bowl containing lotion and sterile swabs.

The patient should lie on her back upon a large bed pan or bed bath, with her knees drawn up and the bedclothes arranged so that she is not exposed more than is necessary. The midwife should first thoroughly wash the vulva with soap and water and disinfect the parts with an efficient antiseptic. Then after careful disinfection of her own hands, she should separate the labia with thumb and finger of her left hand, allow some of the lotion to run into the pan to exhaust all air from the tubing, and then pass the nozzle straight into the vagina. The nozzle should be withdrawn before the lotion has quite run out, the uterus gently squeezed, a sterile pad applied to the vulva, and the patient removed from the pan, dried, and made comfortable.

Suitable fluids for a vaginal douche are:—

(1) Lysol, strength 1-320.
(2) Cyllin, strength 1-320.
(3) Iodine, 1 dram to the pint of sterile water.
(4) Boracic acid, 1 dram to the pint.
(5) Sterile water.

Question.—What is meant by placenta prævia? By what symptoms, and at what period of pregnancy is such a condition generally first suspected? What would you do in the event of the arrival of the doctor being delayed?

Answer.—Placenta prævia is the condition in which the placenta is situated over some portion of the lower uterine segment. The symptoms are those of bleeding, and a history of bleeding without apparent cause. The period of pregnancy at which it is first suspected is during the last two months, when a certain amount of dilatation may take place in the neighbourhood of the internal os, and a portion of the placenta becoming detached, bleeding results.

In the event of the doctor being delayed, if the bleeding is severe and the pelvis normal with a vertex presentation, I should rupture the membranes and apply a tight binder, and then, if the hæmorrhage still continued, I should plug the vagina. If the breech was presenting, I should rupture the membranes, put on a tight binder, and as soon as the os was sufficiently dilated, draw down a foot so as to plug the cervix with the half breech.

Question.—Give a description of that portion of the reproductive tract which undergoes dilatation in the course of labour.

Answer.—The portion of the reproductive tract which undergoes dilatation during labour is made up of the following parts:—

(*a*) The lower uterine segment; that portion of the body of the uterus which at full time is included within three inches of the internal os. It dilates, and its longitudinal fibres contract during labour, but it does not retract, and with dilatation its walls become thinner.

(*b*) The cervix, or neck of the uterus. As the first stage of labour proceeds the cervical canal becomes dilated from above downwards, the external os being the last part to feel the effect of the advancing ovum, and at the end of the first stage of labour has become obliterated.

(*c*) The vagina, the passage leading from the uterus to the vulva. This is capable of great dilatation, and when the external os is completely dilated at the end of the first stage of labour the uterus and vagina form one continuous canal.

Question.—What drugs and antiseptics do you carry to your cases, and under what circumstances are they used?

What special precautions do you take in the case of those which are poisonous?

Answer.—1. Drugs I carry to my cases are:—

(*a*) Liquid extract of ergot, given after labour for post-partum hæmorrhage, and in some cases of ante-partum hæmorrhage, where there is no danger of obstruction to increase the force of uterine contractions.

(*b*) Castor oil, a useful aperient both before and after labour.

(*c*) Syrup of chloral, given in both primary and secondary uterine inertia; in cases of rigid os, and in some cases of eclampsia.

(*d*) Quinine sulphate, given for primary uterine inertia.

(*e*) Sal-volatile, useful if the patient is faint.

2. Antiseptics that I carry to my cases are:—

(*a*) Perchloride of mercury, used for hand lotion and for sponging the patient at a strength of 1-2000. For douching the patient strength 1-4000, followed by a douche of boiled water to wash away any mercury left behind.

(*b*) Carbolic acid, useful for instruments and cleaning purposes at a strength of 1-20. For the hands and patient's skin 1-40.

(*c*) Lysol, useful for sponging and for douching at a strength of 1-160.

Precautions to be taken in the case of poisonous drugs. All poisons should be put into specially distinctive bottles, and labelled with a red label.

Great care must be taken that the accurate dose is given. A measure glass marked in minims and drams should be used, or the correct dose made up by a chemist.

Question.—What notifications may a practising midwife have to make, and to whom?

Answer.—A practising midwife must notify to the local supervising authority—

(1) All cases in which medical help has been summoned.

(2) All cases of death of mother or child which occur before the attendance of a registered medical practitioner.

(3) All cases of still-birth at which the doctor is not present.

(4) All cases in which she has prepared, or assisted to prepare, a dead body for burial.

(5) In cases where she has been in contact with a person suffering from puerperal fever or other infectious conditions, or if she herself is liable to be a source of infection.

(6) Wherever it is proposed to substitute artificial feeding for breast feeding.

(7) Her intention to practise or her having practised in emergency on a certain day in any area other than that in which she is registered.

(8) Any change in her name and address.

She must notify the local sanitary authority where there is purulent discharge from the child's eyes, commencing within 21 days from the date of birth, and where medical help has not been obtained for this discharge.

Question.—Why do you keep a chart of mother and child after delivery?

What information should these charts contain?

Answer.—A chart of mother and child is kept after delivery in order to see at a glance if satisfactory progress is being made, or if abnormal conditions are present.

On the mother's chart should be noted daily the temperature, pulse rate, amount, colour and odour of lochia, number of stools, amount of urine passed, height of fundus above the symphysis pubis, amount of sleep, aperients, or any other drugs administered.

On the baby's chart should be noted daily its temperature, its weight, number of stools, and their character.

If artificially fed a note should also be made on the chart of any change of diet.

Question.—At what period of pregnancy is an ante-natal examination most valuable?

What are the chief points to be determined?

Answer.—Pregnant women, especially primigravidæ, should be examined at regular intervals during their pregnancy, but it is during the last two months that this ante-natal examination is of the most value.

The chief points to determine are:—

1. The approximate size of the pelvis and the relation of the child's head to the pelvis. If there is any contraction of the pelvis the woman should be seen every fortnight during the last six weeks to determine whether the head will go through the brim, or if induction of labour is indicated.

2. Any signs of albuminuria—swelling of hands and feet, persistent headache—failing eyesight, amount of urine passed, which should be tested regularly for albumin. Attention to and treatment of these conditions may ward off eclampsia.

3. Any loss of blood, as this may be an indication of accidental or of unavoidable hæmorrhage.

4. Purulent discharge and sores of the genitals. These conditions, if treated in time, may save the child from blindness and the mother from an added risk of sepis.

Question.—Describe the more common injuries to the infant which may be produced during birth.

Answer.—1. Injuries to head.

(*a*) The frontal or parietal bones may be indented or depressed by instrumental delivery, or from pressure on the sacral promontory where there is contraction of the pelvis.

(*b*) Cerebral hæmorrhage caused by prolonged pressure.

(*c*) Cephalhæmatoma, a tumour caused by rupture of a blood vessel in the periosteum.

2. Injuries to face and neck.

(*a*) Bruising and contusions due to instrumental delivery or to a face presentation.

(*b*) Facial paralysis.

(*c*) Injury to jaw by undue traction in delivering the after-coming head of a breech presentation.

(*d*) Hæmatoma of the sternomastoid muscle, which may result in wry neck.

3. Injuries to trunk and limbs.

Fractures and dislocations may occur in breech deliveries, or where there is difficult shoulder extraction, and in rare cases the liver may be ruptured.

Question.—Mention some of the commoner minor disabilities of pregnancy, and the advice you would give for their relief.

What would make you decide to advise medical aid?

Answer. — Minor disabilities from which pregnant women may suffer :—

1. Digestive disturbances.

(*a*) Morning sickness. Patient should take a light breakfast, or some hot milk before rising, and keep the bowels acting every day.

(*b*) Heartburn, flatus, and indigestion are common. Indigestible articles of food should be avoided, the patient told to masticate her food well, and to take a light early supper.

(*c*) Constipation. Advise patient to take a laxative diet, plenty of fruit and green vegetables; to drink a glass of water first thing in the morning and the last thing at night; to take moderate exercise, and mild purgatives if necessary, such as senna tea, liquid paraffin, or cascara.

2. Pressure symptoms.

(*a*) Varicose veins. Relieve pressure where possible; wear no garters.

(*b*) Hæmorrhoids, external and internal. Avoid constipation and apply soothing ointment.

(*c*) Frequent micturition. This needs no treatment but the urine should be tested for pus—a symptom of cystitis.

(*d*) Incontinence of urine. This may be due to retention and a catheter should be passed.

3. Neuralgia. A dentist should be consulted in early pregnancy.

4. Pruritis vulvæ. Due to irritating discharge. Bathe with lead lotion or boracic lotion.

Medical aid should be advised :—

(1) Deformity or stunted growth.

(2) Loss of blood.

(3) Excessive sickness.

(4) Puffiness of hands or face; fits or convulsions.
(5) Dangerous varicose veins.
(6) Purulent discharge and sores of the genitals.
(7) Whenever illness or abnormality has occurred in the previous pregnancy, and whenever the previous pregnancy has ended in an abortion, a premature labour, or a still-birth.

Question.—Describe in detail all the precautions you will take before making a vaginal examination. How will you do it, and what information will you get from it at the beginning of labour?

Answer.— Before making a vaginal examination the bladder and, if possible, the rectum, should be empty. The woman should lie on her left side, with the hips well to the edge of the bed and her knees drawn up. After cutting the pubic hairs, I should wash the vulva and surrounding parts with soap and water and rinse with clean water. I should then thoroughly cleanse my hands and forearms, by scrubbing them with soap and water, and after rinsing them in clean water, immerse them for one minute at least in an efficient antiseptic solution. I should then swab the vulva from before backwards with cotton-wool wrung out of the same solution; the labia should be separated and the parts round the urethra carefully cleansed.

Information to be gained from a vaginal examination at the commencement of labour is:—

(1) The presenting part: its position in the pelvis, whether fixed or movable, the advance during labour, the prolapse of the cord.
(2) The bag of membranes: size, shape, and condition.

(3) Size of the os and length and condition of cervical canal.

(4) The pelvis, and whether the sacral promontory can be felt.

(5) The condition of the rectum and vagina.

Question. — What symptoms and signs, and what changes in her appearance, would warn you that the patient in labour is seriously ill?

Answer.—(1) The patient might be seriously ill due to obstructed labour in this case.

Her pulse rate would be 120 or more. Temperature raised above normal, accompanied by vomiting. Her skin would be hot and dry and her tongue brown and furred. She would have a pale, haggard and anxious look, and would probably complain of feeling ill and exhausted.

(2) She might be seriously ill from concealed hæmorrhage. There would be marked pallor of skin and mucous membranes, small, feeble, rapid pulse, sub-normal temperature, restlessness, sensation of nausea, faintness. There would be absence of intermittent uterine contractions and increase in size and hardness of uterus.

(3) She might develop eclampsia whilst in labour, or have an epileptic fit. There would be movements of the muscles of head and face, the eyelids twitch, and the eyeballs turn to one side. This would be followed by marked contractions of all the muscles of the body, and then violent convulsions. The patient would become cyanosed, foam at the mouth, and the breathing would be noisy and stertorous.

Question.—What advice would you give to the expectant mother regarding the requirements for her labour and the preparation of her room?

Answer.—The expectant mother should be given advice on personal hygiene, to include the care of skin and teeth; attention to the bowels, to secure a regular daily action; care of the breasts and nipples, to avoid pressure on them and to keep the nipples clean and soft; the need of fresh air, and a certain amount of exercise. She should be advised to have ready for her confinement: Clean sheets, a clean nightgown, petticoat, roller towel, clean diapers or pads, and soap, a tin bath or pail, and at least two basins and plenty of boiling water.

For the baby she will require a cradle and hot-water bottle, clothes, safety-pins, some clean flannel and rag, starch powder, vaseline, and a reel of white cotton and needles. The room should, if possible, be large and sunny, well ventilated, and scrupulously clean and free from superfluous furniture. It should have a fireplace, and a fire should be lighted when labour commences. The bedstead (which should be a single one if possible) should be washed or rubbed over with turpentine, the mattress well protected with a mackintosh, and boards placed underneath the mattress to prevent any sagging of the bed. It should be made up with clean sheets and bed-clothes.

The woman should be advised to take a dose of castor oil directly she feels that labour is imminent, to take a warm bath, and to send for the midwife as soon as labour commences.

Question.—Give the common causes, and state the disadvantages of early rupture of the membranes. What would you do in the event of the membranes rupturing at the onset of labour in a primipara?

Answer.—The chief causes of too early rupture of the membranes are: (1) Disproportion between the size of the

pelvis, and that of the presenting part, as with a contracted pelvis or an abnormal presentation. Where the presenting part does not fill the brim of the pelvis there is a large bag of forewaters, the tension is increased, and they are liable to rupture. (2) Vaginal examinations during a pain may accidentally cause rupture of membranes. (3) Excess of liquor amnii. (4) Straining or a sudden jar. The disadvantages of early rupture are: (1) Delay in the first stage of labour, the bag of membranes being the best dilator of the cervix. (2) Difficulty in rectifying a malpresentation. (3) Obstructed labour in those cases where the pelvis is contracted or the presentation abnormal. (4) In cases of prolapse of cord the dangerous pressure may cause death of child. (5) Asphyxia of child due to contracting uterus pressing so tightly upon it as to interrupt placental circulation. In the event of the membranes rupturing at the onset of labour with a primipara, a careful diagnosis of the cause should be made and medical assistance obtained. It might be necessary to dilate the cervix artificially by means of a De Ribes bag, or to administer drugs such as morphia, chloral, or bromide. In cases of early rupture of the membranes special care must be taken to ascertain the condition of the fœtal heart from time to time.

Question.—What signs would enable you to recognise during labour, with the vertex presenting, that the head was delayed (*a*) above the brim, (*b*) in the cavity, (*c*) at the outlet?

Answer.—(*a*) Signs that the head was delayed above the brim during labour would be on abdominal palpation, the head being freely movable above the brim and not able to be pressed down. By vaginal examination, no pre-

senting part being felt, and an elongated bag of membranes if they were unruptured. (*b*) Delay in the cavity would be recognised on vaginal examination by the head being well down and fixed, but making no advance with the pains. A badly flexed head; both fontanelles being felt would cause delay. The cervix not fully dilated being felt hard and resistant, and often an œdematous anterior lip, and sometimes the os displaced upwards and backwards. (*c*) Delay at the outlet due to rigidity of vagina and pelvic floor would be recognised by the head distending the vulva with each pain, but unable to escape although the contractions were strong.

Question.—Describe the appearance of a child born in a state of white asphyxia. What might have produced this condition?

Answer.—The child's face is white in colour, and it makes no attempt to breathe. There is no tone in the muscles, no facial contortions, and the pulsations in the cord are feeble, slow, and irregular. The baby is suffering from shock, and is hovering between life and death. This condition is due to injury of the respiratory centre of the brain from (*a*) excess of carbonic acid, (*b*) prolonged pressure.

Question.—Enumerate the advantages of breast feeding. In the event of failure to breast feed, state (*a*) the directions to the midwife given in the rules, (*b*) the exact instructions you would give to the mother for the artificial feeding of her baby when you cease attendance.

Answer.—Advantages of breast feeding are:—

1. It is the food that Nature has provided for the baby, and so natural resistance to disease is greater in a breast-fed infant, and it is less likely to suffer from diarrhœa, constipation, or rickets.

2. Human milk is warm, sterile, and alkaline, and contains protein, sugar, and fat in the correct proportions for the child to digest.

3. Human milk is a living fluid, whilst sterilised cow's milk is dead.

(*a*) If artificial feeding is resorted to, the midwife must notify the Local Supervising Authority the date it was proposed to substitute artificial feeding, and give the reasons.

(*b*) The mother should be instructed to obtain clean, fresh cow's milk for her baby. It should be given at first in the proportion of 1 part milk to 2 parts water. To prepare it, take 7 oz. of clean, fresh milk, 14 oz. water, 1 oz. lactose, ½ oz. cream. Use a Soxhlet's apparatus if possible. Put 2 oz. of the mixture in each bottle, place on the top of the bottle a rubber disc and metal cap, and put the bottles into the boiler with about 3 inches of water. Put on the lid and let the water boil for five minutes, then allow it to cool down without removing the lid. After cooling, the bottles should be removed from the water and kept in a cool place until required. At the time of feeding add to each bottle 2 grains of citrate of soda, and give the milk to the baby at a temperature of 100° F., using a teat which has been boiled and kept covered in clean water.

The mother should be told to take her baby each week to the Welfare Centre to be weighed, and for advice when to increase the amount and strength of the food.

Question.—Describe in detail your management of the third stage of labour and your examination of the placenta and membranes.

Answer.—The third stage of labour may be conducted with the patient either in the left lateral or the dorsal position, the latter being more generally used. After the child is born, the uterus must be followed down with the left hand and compressed firmly to express the liquor amnii, the hand being kept there to see that good contraction is maintained. If the uterus acts normally, it should not be massaged; if, however, it becomes relaxed and distended with clots, and rises to the level of or above the umbilicus, it should be gently rubbed and squeezed until it hardens up and contracts properly.

Signs that the placenta has been expelled into the vagina are:—

(*a*) The uterus rises in the abdomen.
(*b*) It becomes smaller and harder.
(*c*) The cord descends.
(*d*) There may be a small gush of blood.

The uterus should then be grasped, and firm pressure made downwards and backwards in the axis of the pelvis, and the placenta received in the right hand or in a kidney bowl. The weight of the placenta drags the membranes after it; should these hang back, gentle traction in the axis of the outlet will help delivery. The vulva should then be swabbed with an antiseptic solution and a sterile pad applied. After the birth of the placenta it is still important to control the uterus. The placenta and membranes should be placed in a bowl of clear water and freed from blood clot. The placenta should be held with the fœtal surface resting in the hollow of the hands, and the maternal surface carefully examined to see if the lobes all fit together properly; if any portion is missing a gap is seen, and the lobe will

have a ragged appearance. When examining the membranes the amniotic cavity should be filled with water; this will give a fair idea if any have been retained, or if there is sufficient present to cover the child. The amnion should be separated from the chorion as far as the insertion of the cord, and it should be carefully noted if the chorion is attached all round the edge of the placenta, and forms a good sac. Any openings in the membranes should also be carefully examined. In addition to the large opening, there may be others, due to pieces of membrane being left behind in the uterus, or to the retention of a placenta succenturiata.

Question.—What are the chief causes of fever during the puerperium?

What investigation would you make in a case where the temperature on the fourth evening after delivery is 103·6?

Answer.—The chief causes of fever during the puerperium are:—

1. Sepsis due to the introduction of germs into the parturient canal during the course of labour. This may be divided into (*a*) sapræmia due to putrefaction; the poisons formed thus are absorbed into the blood stream; (*b*) septicæmia, germs which produce the disease being actually in the blood stream.

2. Engorged breasts, flushed breasts, or threatened breast abscess.

3. Emotional.

4. Gastro-intestinal disturbances.

5. Diseases complicating the puerperium, i.e. cystitis, pneumonia, influenza.

Special investigation to be made should temperature be 103·6 on the fourth day: The pulse rate and respira-

tions; amount, colour and odour of lochia; height of uterus and if tender to touch. To inquire if the woman had had rigors. What aperient had been given and the number of times the bowels had been moved. The condition of the breasts.

Question.—How do you recognise that labour has commenced? What are the essential features of each stage?

Answer.—Labour may be said to have commenced when the pains are regular, increase gradually in frequency and severity, when they are felt in the region of the sacrum, and are accompanied by the show and by contractions of the uterus, and when there is dilatation of the cervix.

The essential features of the

(1) First stage of labour are the dilatation of the cervix and of the lower uterine segment. The two forces concerned in dilatation are: (*a*) The thrust of the bag of waters. (*b*) The pulling up of the lower uterine segment.

(2) Second stage, the stage of expulsion; this is brought about by retraction of the uterus and direct uterine force. The auxiliary muscles, the diaphragm, and the abdominal muscles come into action and markedly aid the expulsion of the child.

(3) Third stage, the separation and expulsion of the placenta and membranes. This is brought about by diminution of placental site—uterine contractions and retraction. It is usually shortened by the artificial expression of the placenta.

Question.—Name the venereal diseases. What are the signs of each which you should recognise in mother and infant? What is the midwife's duty in such cases under the Rules of the Central Midwives Board.

Answer.—The venereal diseases are: (1) Gonorrhœa. (2) Syphilis.

1. A woman suffering from gonorrhœa would have a purulent discharge from urethra, greenish or yellow in colour, with redness and swelling round the orifice of the urethra. She might complain of burning pain on micturition. There might be a history of chronic ill-health, and she might have ophthalmia or labial abscesses.

Gonorrhœa in the mother is likely to cause ophthalmia in the child—its mouth may be infected, and it may suffer from vulvitis.

2. Signs of syphilis in the woman would be flat raised patches, sores, or ulcerations of the external genitals, inflamed glands in the groin, rash on the chest, or coppery stains, where an old rash has been. The patient is ill-nourished, the hair falls out, there may be pain in the joints and sore throat. There is often a history of miscarriages and still-born children.

The infant is usually puny, has a rash often described as like "raw ham." It has "snuffles" and has sores round the anus and genitals. It digests badly, and wastes, and the stools are green.

The midwife's duty is to call in to her assistance a registered medical practitioner in all cases during pregnancy or labour where there is a purulent discharge or sores of the genitals.

And in the case of the child where there is inflammation of, or discharge from, the eyes, however slight, she must:

(1) Immediately advise medical help.

(2) Fill up and hand to nearest relative or friend the form for medical help.

(3) Send notice to the Local Supervising Authority that medical help has been sought.

Question.—Describe in detail the management of the third stage of labour, giving your reasons for what you consider the most important item therein.

Answer.—The third stage of labour may be conducted with the patient either in the left lateral or the dorsal position, the latter being more generally used. After the child is born, the uterus must be followed down with the left hand and compressed firmly to express the liquor amnii, the hand being kept there to see that good contraction is maintained. If the uterus acts normally, it should not be massaged; if, however, it becomes relaxed and distended with clots, and rises to the level or above the umbilicus, it should be gently rubbed and squeezed until it hardens up and contracts properly. Signs that the placenta has been expelled into the vagina are (*a*) the uterus rises in the abdomen; (*b*) it becomes smaller and harder; (*c*) the cord descends; (*d*) there may be a small gush of blood.

The uterus should then be grasped and firm pressure made downwards and backwards in the axis of the pelvis, and the placenta received in the right hand or in a kidney bowl. The weight of the placenta drags the membranes after it; should these hang back, gentle traction in the axis of the outlet will help delivery. The vulva should then be swabbed with an antiseptic solution and a sterile pad applied. After the birth of the placenta it is still important to control the uterus. The placenta and membranes must be carefully examined to see that no portion has been retained. The perineum must be carefully examined in a good light for any laceration. The most important item is to prevent post-partum hæmorrhage, and to properly manage the third stage of labour. The midwife must not

leave the patient until the uterus is firmly contracted and her pulse below 100.

Question.—How would you recognise fœtal distress? What condition may the child be in when born, and how would you deal with it?

Answer.—The signs of fœtal distress are—

(*a*) Continued slowing of the fœtal heart below 110 or quickening above 160 per minute between the pains.

(*b*) Passage of meconium with the vertex presenting.

(*c*) Feeble pulsations in the umbilical cord, where the breech is presenting, or where the cord has prolapsed.

The child when born would probably be in a state of asphyxiation :—

1. If suffering from *Blue* asphyxia, it should be held up by its feet and the mucus and liquor amnii cleared away from its air passages. It should then be incited to breathe by rubbing its spine, smacking its buttocks, or dipping it alternately into a basin of hot and cold water. If in spite of this treatment the child makes no attempt to breathe, artificial respiration must be resorted to.

2. If suffering from *White* asphyxia, the baby must be handled as gently as possible ; it is suffering from shock, and is hovering between life and death. It should be separated at once, covered with a warm blanket, and mucus and liquor amnii cleared away from its air passages. It should then be placed in a warm bath and artificial respiration performed in the bath; a few drops of brandy may be poured down its throat.

In both white and blue asphyxia, if the child does not at once respond to the midwife's efforts, the doctor should be summoned.

Question.—What is the significance of albumin in the urine of a pregnant woman? How would you discover its presence? And, if found, what is your duty?

Answer.—Pregnant women are subject to a very serious disease, known as albuminuria, due to pregnancy, and if the patient is treated in time, eclampsia may be prevented. Every pregnant woman should have her urine examined when the midwife is first engaged, and at least every fortnight afterwards until term. The presence of albumin in the urine can only be verified by testing it. On heating a specimen of urine over a spirit lamp a white cloud may appear; if this does not clear up when a few drops of acetic acid are added to it, albumin is present.

The midwife's duty if she discovers her patient has albumin in her urine is to insist on her consulting a registered medical practitioner, and to see that the treatment ordered is carried out.

Question.—Describe the means to be adopted in the management of the second stage of labour in order to avoid (*a*) perineal rupture; (*b*) infection of the mother.

Answer.—(*a*) To avoid lacerations of the perineum, prevent the head being born too quickly. The advance of the head can be delayed by pressure. The patient should cease bearing down, and be encouraged to cry out. The head should be kept well flexed until the occiput is born. When the occiput has escaped from under the pubic arch, the forehead is drawn forward and extension of the head is encouraged. The head should not be delivered until the height of the pain is passed. The shoulders should be rotated into the antero-posterior diameter of the outlet, and the body carried well forward in delivering.

(*b*) To avoid infection of mother during the second stage

of labour, the case throughout should be conducted with strict surgical cleanliness. Good hygienic surroundings for the delivery and personal cleanliness of the patient. The bed must be made up with clean linen, and the mackintosh disinfected. The midwife must be scrupulously clean in her person, clothing and appliances. Before touching the generative organs or their neighbourhood, she must on each occasion disinfect her hands and forearms. She must wash the patient's external parts with soap and water with material which has been boiled, and swab them with antiseptic solution before making vaginal examinations or passing a catheter. No more internal examinations should be made than are absolutely necessary. All instruments and other appliances must be disinfected (by boiling if possible) before being brought in contact with the patient's generative organs.

Question.—What signs in the infant would make you think that it had received injury during birth ?

Answer.—White asphyxia is often due to some injury during birth due to prolonged pressure or injury from forceps. Its signs are the face and body white in colour, no tone in the muscles, the umbilical cord beating feebly, slowly and irregularly.

In fracture of the skull there would be found a depression or unevenness in the skull, and hæmorrhage might take place inside or outside the skull, or the brain might be injured, causing paralysis, or convulsions. The respiration would be feeble.

In facial paralysis, caused by forceps pressing on facial nerve, the child's face is drawn to one side. A swelling may occur on the side of the neck showing some injury to the sterno mastoid muscle. The long bones of the limbs

or the clavicle may be broken with a difficult delivery, these may be felt on careful examination. Cephalhæmatoma may be due to injury during birth, and is seen as a fluctuating swelling usually over one of the parietal bones.

Question.—What are the chief items to be entered in your register of cases? What is the importance of keeping the register properly?

Answer.—A midwife must enter in her register the date of expected confinement, name, address and age of patient, number of previous labours and miscarriages, date and hour of midwife's arrival. The presentation, date and hour of child's birth, sex, whether born living or dead, full time or premature. Number of weeks, name of doctor, if called; complications (if any) during labour; date of midwife's last visit; condition then of mother and child.

If any drug other than a simple aperient has been administered, the name and dose of the drug, and the time and cause of its administration. If for any reason she continues her attendance after the tenth day, with the explanation of the reason.

It is important in the interest of mother and child, as well as of the midwife, that the register be properly kept, and the Local Supervising Authority shall make arrangements to secure a proper inspection of the register, the midwife giving every reasonable facility for such inspection.

Question.—I. Describe in detail your examination of a pregnant woman at term. II. What conditions may you find that would require the services of a registered medical practitioner? III. What are your duties under the Rules of the Board in such conditions?

Answer.—I. The examination should be made under four heads: 1. Abdominal; 2. Vaginal; 3. Breasts; 4. Urine.

1. The patient should lie on her back with her knees drawn up, head and shoulders slightly raised. (*a*) Inspection. Note the amount of distention, pigmentation, striæ, œdema, rashes, size and shape of uterus, contractions and movements of the child. (*b*) Palpation. The midwife should stand on the right side of patient facing her feet, and with both hands on the sides of the uterus press fingers into the brim of the pelvis; the presenting part, the degree of engagement, and some idea of the size can thus be obtained. Then facing the patient's head with her hands over the fundus and sides of the uterus, she should be able to determine the direction of the back and limbs which would aid her to diagnose the position. (*c*) Auscultation. The fœtal heart should be listened to and counted.

2. Vaginal examination should be made to ascertain if labour has begun, if there is any dilatation of the cervix, and if there is any bleeding, discharge, or sores.

3. The breasts and nipples should be examined and advice given to the patient as to their care.

4. The urine must be examined for albumin.

II. Conditions which may be found requiring the services of a doctor are: Malpresentation or a vertex presenting which cannot be pressed into the pelvis indicating contraction of pelvis. Twins—hydramnios—œdema—albumin in the urine with other signs of threatened eclampsia—loss of blood—dangerous varicose veins—sores of the genitals or purulent discharge.

III. Under the Rules of the Board the midwife as soon

as she becomes aware of any abnormality occurring during pregnancy and in all cases of illness of the patient must call in to her assistance a registered medical practitioner, using for this purpose the form of sending for medical help properly filled up and signed by her.

Question.—What symptoms does cancer of the womb give rise to in a pregnant woman? If you have reason to suspect the presence of this disease what is your duty?

Answer.—Cancer of the uterus in a pregnant woman would give rise to irregular hæmorrhages; discharge red and probably offensive; pain in the pelvis, and on vaginal examination the cervix bleeding when touched.

The midwife's duty if she suspects the presence of cancer is to avoid expressing any opinion of her own, but to advise the woman to go at once to a properly qualified medical practitioner and insist on being examined. Under the Rules of the Central Midwives Board she must call to her assistance a registered medical practitioner in the case of a pregnant woman where there is loss of blood.

OBSTETRICAL TABLE.

Jan.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Oct.	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	*Nov.*
Feb.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28				
Nov.	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5				*Dec.*
Mar.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Dec.	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	*Jan.*
Apl.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
Jan.	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	*Feb.*
May	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Feb.	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	1	2	3	4	5	6	7	*Mar.*
June	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
Mar.	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6		*Apl.*
July	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Apl.	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	*May*
Aug.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
May	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	*June*
Sept.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
June	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7		*July*
Oct.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
July	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	*Aug.*
Nov.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
Aug.	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	*Sept.*
Dec.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Sept.	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	*Oct.*

The safest method of calculating date of confinement is to reckon 280 days from first day of the last menstruation, or 273 days from date of impregnation. The above Table shows periods of 280 days.

(E.) ABSTRACT OF THE RULES OF THE CENTRAL MIDWIVES BOARD.

REGULATING, SUPERVISING, AND RESTRICTING WITHIN DUE LIMITS THE PRACTICE OF MIDWIVES.

Directions to Midwives CONCERNING THEIR PERSON, INSTRUMENTS, &C.; THEIR DUTIES TO PATIENT AND CHILD; AND THEIR OBLIGATIONS WITH REGARD TO DISINFECTION, MEDICAL ASSISTANCE AND NOTIFICATION.

A woman whose name is on the Midwives' Roll is acting as:—

A. A Midwife, and is subject to the rules, and is therefore bound to notify the Local Supervising Authority of the fact under Section 10 of the Midwives Act, 1902.

(*a*) When she has been engaged to deliver the patient;

(*b*) When sent for in an emergency, no doctor having been engaged;

(*c*) When a doctor makes an arrangement with a midwife engaged as a Maternity Nurse that he is not to be sent for unless she requires him;

(*d*) When a doctor arranges with a midwife that she shall deliver patients for him;

(*e*) When a doctor has been engaged to deliver the patient and she has sent for him on the onset of labour but she leaves the house after delivery before he arrives.

Note.—The case should be entered in her Register in the usual way, and in (*c*) (*d*) and (*e*), the date on which the case is handed back to the doctor and her position as a nurse is resumed.

B. A Maternity Nurse, and is not subject to the rules (except Rules E 6, 18, 22 (1) (*d*) and (*e*), 22 (2), 23 (*d*) and (*e*), and 28).

When a doctor has been engaged to deliver the patient and she has sent for him on the onset of labour and he arrives before she leaves the house.

If these conditions are not fulfilled she is subject to all the rules.

Ante-Natal Care.

1. When engaged to attend a labour the midwife must interview her patient at the earliest opportunity to inquire as to the course of present and previous pregnancies, confinements, and puerperia, both as regards mother and child, and to advise as to personal and general arrangements for the confinement, and, with the consent of the patient, visit the house.

Whenever illness or abnormality has occurred in the previous pregnancy, and whenever the previous pregnancy has ended in an abortion, a premature labour, or a stillbirth, the midwife, on being engaged to attend the patient in her next confinement, shall explain that

the case is one in which skilled medical advice is required, and shall urge the patient to seek advice from her medical attendant, or at a hospital or other suitable institution.

Note.—It is desirable that midwives should keep notes of their ante-natal visits for reference later should occasion arise.

2. The midwife must be scrupulously clean in every way, including her person, clothing, appliances, and house; she must keep her nails cut short, and preserve the skin of her hands as far as possible from cracks and abrasions.

When attending to her patients she must wear a clean dress of washable material that can be boiled, such as linen or cotton, and over it a clean washable apron or overall.

The sleeves of the dress must be made so that the midwife can tuck them up well above the elbows.

For list of appliances see Rule 3.

The Midwife's Bag.

3. When called to a confinement a midwife must take with her in a metal case or in a bag or basket kept for that purpose only and furnished with a removable lining which can be disinfected:—

(*a*) An appliance for giving vaginal injections, a different appliance for giving enemata, a catheter, a pair of scissors, a clinical thermometer, and a nail-brush.

The [1] Local Supervising Authority may, in the case of untrained Midwives, use its discretion with regard to insisting upon the carrying of a catheter and appliances for giving vaginal injections.

(*b*) An efficient antiseptic or efficient antiseptics for such purposes as—

(1) Disinfecting the hands.
(2) Douching in special cases.
(3) Cleansing the infant's eyelids.

4. Before touching the generative organs or their neighbourhood the midwife must on each occasion disinfect her hands and forearms.

5. All instruments and other appliances must be disinfected, preferably by boiling, before being brought into contact with the patient's generative organs.

Notification of Infectious Diseases.

[2] 6. Whenever a midwife has been in attendance, whether as a midwife or as a nurse, upon a patient, or in contact with a person, suffering from puerperal fevers or from any other condition supposed to be infectious, or is herself liable to be a source of infection, she must at once notify the Local Supervising Authority of the fact, must (unless the Authority relieve her from that obligation)

[1] The Local Supervising Authority is the County Council for midwives practising in a County area, and the City or Borough Council for midwives practising in a County Borough.

[2] See Rule 26.

disinfect herself and all her instruments and other appliances, and have her clothing thoroughly disinfected, to the satisfaction of the Local Supervising Authority, before going to any other maternity patient. (See Rule 22, 1 (*e*), and Rule 23, form (*e*).)

Unless otherwise directed by the Local Supervising Authority, all washable clothing must be boiled, and other clothing must be sent to be disinfected by the Local Sanitary Authority.[1]

Duties to Patient.

7. A midwife in charge of a case of labour must not leave the patient without giving an address by which she can be found without delay; and after the commencement of the Second Stage, she must stay with the woman until the expulsion of the placenta and membranes, and as long after as may be necessary. In cases where a doctor has been sent for on account of the labour being abnormal or of there being threatened danger (see Rule 20), she must await his arrival and faithfully carry out his instructions.

If for any reason the services of a registered medical practitioner be not available, the midwife must, if the case be one of emergency, remain with the patient and do her best for her until the emergency is over.

After having complied with the Rule as to the summoning of medical assistance, the midwife will not incur

[1] In order to ascertain who is the appropriate Sanitary Authority the midwife should inquire of the Inspector of Midwives or of the Local Supervising Authority.

any legal liability by remaining on duty and doing her best for her patient.

NOTE.—*Midwives must not, except under a grave emergency, undertake operative procedure or any treatment which is outside their province. The question whether in any particular case such procedure or treatment was justified will be judged on the facts and circumstances of the case.*

8. The midwife must wash the patient's external parts with soap and water, and then swab them with an efficient antiseptic solution on the following occasions :—

(*a*) Before making the first internal examination;
(*b*) After the termination of labour;
(*c*) During the lying-in period;
(*d*) Before passing a catheter.

The swabbing with antiseptic solution must be repeated before each further examination and before a douche is given. For this purpose the midwife must on no account use ordinary sponges or flannels, but material which has been boiled or otherwise disinfected before use.

[1] 9. No more internal examinations should be made than are absolutely necessary.

[1] This is a direction to practising midwives, and is not to be taken as relieving a pupil undergoing a course of training from any of the obligations entailed upon her by Rule C 1 (1) (*a*).

10. The midwife in charge must in all cases of labour examine the placenta and membranes before they are destroyed, and must satisfy herself that they are completely removed.

11. The midwife must remove soiled linen, blood, fæces, urine, placenta and membranes from the neighbourhood of the patient and from the lying-in room as soon as possible after the labour, and in every case before she leaves the patient's house.

The Midwife's Responsibility.

[1] 12. The midwife shall be responsible for the cleanliness, and shall give all necessary directions for securing the comfort and proper dieting of the mother and child during the lying-in period, which shall be held, for the purpose of these regulations, and in a normal case, to mean the time occupied by the labour and a period of ten days thereafter.

Should the midwife for any reason continue her attendance after the tenth day the fact must be noted in her Register, with the explanation of the reason.

If after ceasing to attend a case the midwife subsequently attends a mother or child suffering from illness connected with the confinement, all rules under Section *E* (in so far as they are appropriate to the case) shall apply.

[1] See Rule 26.

Promotion of Breast Feeding.

[1] 12*a*. A midwife must forthwith notify the Local Supervising Authority of each case in which it is proposed to substitute artificial feeding for breast feeding. (See Rules 22 (1) (*f*) and 23, Form (*f*).)

Note.—The midwife should endeavour to promote breast feeding and should, when breast feeding cannot apparently be continued, urge medical advice. In nearly all districts health visitors and maternity and child welfare centres are provided for the assistance of mother and child. It is desirable that the midwife when she ceases attendance should advise the patient to avail herself of such help.

13. A case of normal labour in these regulations shall mean a labour in which there are none of the conditions specified in Rule 21.

14. The midwife shall take and record the pulse and temperature of the patient at each visit, entering her records, with dates and times, in a notebook or on charts, which must be carefully preserved.

Duties to Child.

15. In the case of a child born apparently dead, the midwife must carry out the methods of resuscitation which have been taught her.

[1] See Rule 26.

16. As soon as the child's head is born, and if possible before the eyes are opened, its eyelids must be carefully cleansed.

17. On the birth of a child which is in danger of death, the midwife shall inform one of the parents of the child's condition.

General.

18. No midwife shall lay out a dead body except in the case of a patient upon whom she has been in attendance at the time of death.

After laying out a dead body for burial she must notify the Local Supervising Authority and undergo adequate cleansing and disinfection in accordance with Rule 6.

19. A midwife must note in her Register of Cases each occasion on which she is under the necessity of administering or applying in any way any drug other than a simple aperient, the name and dose of the drug, and the time and cause of its administration or application. (See Rule 24, *note*.)

Conditions in which Medical Help must be sent for.

[1] 20. In all cases of illness of the patient or child, or of any abnormality occurring during pregnancy, labour, or lying-in, a midwife must forthwith call in to her assistance a registered medical practitioner, using for this purpose the form of sending for medical help (see Rule

[1] See Rule 26.

23 (*a*)), properly filled up and signed by her. The conditions referred to in this Rule shall be deemed to be emergencies for the purpose of Section 14 of the Midwives Act, 1918.

[1] 21. The foregoing rule shall particularly apply:—

(1) In all cases in which a woman during PREGNANCY, LABOUR, or LYING-IN appears to be dying or is dead.

PREGNANCY.

(2) In the case of a PREGNANT woman, when there is any abnormality or complication, such as—

Deformity or stunted growth,
Loss of blood,
Abortion or threatened Abortion,
Excessive sickness,
Puffiness of hands or face,
Fits or Convulsions,
Dangerous varicose veins,
Purulent discharge,
Sores of the genitals.

LABOUR.

(3) In the case of a woman in LABOUR at or near term, when there is any abnormality or complication, such as—

Fits or Convulsions,
A purulent discharge,
Sores of the genitals,

[1] See Rule 26.

A malpresentation,
Presentation other than the uncomplicated head or breech,
Where no presentation can be made out,
Where there is excessive bleeding,
Where two hours after the birth of the child the placenta has not been completely expelled,
In cases of serious rupture of the perineum, or of other injuries of the soft parts.

LYING-IN.

(4) In the case of a LYING-IN woman, when there is any abnormality or complication, such as—

Fits or Convulsions,
Abdominal swelling and tenderness,
Offensive lochia, if persistent,
Rigor, with raised temperature,
Rise of temperature above 100·4° F., with quickening of the pulse for more than twenty-four hours,
Unusual swelling of the breasts with local tenderness or pain,
Secondary post-partum hæmorrhage,
White leg.

THE CHILD.

(5) In the case of the CHILD, when there is any abnormality or complication, such as—

Injuries received during birth,
Any malformation or deformity endangering the child's life.

Dangerous feebleness in a premature or full-term child,

[1] Inflammation of, or discharge from, the eyes, however slight,

Serious skin eruptions, especially those marked by the formation of watery blisters,

Inflammation about, or hæmorrhage from, the navel.

Notification TO THE LOCAL SUPERVISING AUTHORITY.

[2] 22. (1) The midwife must, as soon as possible, send notice on the prescribed form to the Local Supervising Authority, in accordance with Rule 23, in the following cases:—

[2] (*a*) *Medical help.*—Whenever the advice of a registered medical practitioner has been sought.

[1] *Note.*—In cases where the eyes are affected the duties of the midwife are:—

(1) To call in to her assistance a registered medical practitioner, using for this purpose the form for medical help. (See Rules *E* 20 and 23 (*a*).)

(2) To send notice to the Local Supervising Authority that medical help has been sought. (See Rules *E* 22 (1) (*a*) and 23 (*a*)).

(3) **Also** when there is a **purulent** discharge commencing within 21 days from the date of birth and medical help has **not** been obtained for this discharge, to notify the Local Sanitary Authority. (See Rule *E* 6, *Note.*)

[2] See Rule 26.

[1] (*b*) *Deaths.*—In all cases of the death of mother or child.

[1] (*c*) *Stillbirths.*—In all cases of stillbirth where a registered medical practitioner is not in attendance at the time of birth.

Note.—A child is deemed to be stillborn when after being completely born it has not breathed or shown any sign of life. (See Rule 15.)

[1] (*d*) *Laying out the dead.*—In all cases in which she has prepared, or assisted to prepare, a dead body for burial. (See Rule 18.)

[1] (*e*) *Liability to be a source of infection.*—Whenever a midwife has been in attendance, whether as a midwife or as a nurse, upon a patient, or in contact with a person, suffering from puerperal fevers or from any other condition supposed to be infectious, or is herself liable to be a source of infection. (See Rules 6 and 23, Form (*e*).)

[1] (*f*) *Artificial Feeding.*—Whenever it is proposed to substitute artificial feeding for breast feeding (See Rules 12*a* and 23, Form (*f*).

(2) *Change of name or address.*—All midwives whether practising or not, must immediately notify the Central Midwives Board and the Local Supervising Authority of any change of name or address.

Note.—Intention to practise.—Notice of intention to practise must be given in accordance with section 10 of the Midwives Act, 1902 (Schedule, Form VIII).

[1] See Rule 26.

[1] 23. For the purposes of the preceding rules the use of the following forms shall be compulsory:—

(*a*) *Form of Sending for Medical Help.*

No.....Date.....
This notice is sent in respect of [2].....
.....
Address.....
Medical assistance is sought by [3].....
on account of.....
.....
[4] The case is urgent.
Sent to (*name of doctor or institution*).....
at (*address*).....
Time of sending message { By messenger..... / By telephone.....
Signed.....Certified Midwife.
Address .....
.....

Note.—Information as to stage of labour and other particulars should be given.

The midwife shall make two copies of the above, making, with the original document, three forms in all. The original she shall keep, the second she shall send

[1] See Rule 26.
[2] Here fill in name of patient.
[3] Here insert "me," or "relative," or "friend," as the case may be.
[4] If the case is not urgent cross this out.

to the doctor in case of assistance being sought by her (not where the assistance has been sought by the relative or friend only), and the third she shall send to the Local Supervising Authority as soon as possible, but within twenty-four hours at the latest.

Note.—The medical practitioner responding to this call will be paid his fee by the Local Supervising Authority for his attendance on this case in accordance with the scale prescribed by the Ministry of Health.

This fee may be recovered from the patient, according to her means, by the Local Supervising Authority.

(*b*) *Form of Notification of Death.*

To the Local Supervising Authority of the [1] Administrative County of.....
or [1] the County Borough of.....
or [1] the Urban District of.....

I, the undersigned, being a Midwife holding the Certificate No.....of the Central Midwives Board, hereby notify that the following death occurred in my practice on the.....day of.....
19....., at.....[1] A.M./P.M.
Name of deceased.....
Address of deceased.....
Age of deceased.....
Date of Delivery.....
Signed..... .....Certified Midwife.
Address.....
.....

[1] Strike out the words not applicable.

(*c*) *Form of Notification of Stillbirth.*

To the Local Supervising Authority of the [1] Administrative County of.....
or [1] the County Borough of.....
or [1] the Urban District of.....

I, the undersigned, being a Midwife holding the Certificate No.....of the Central Midwives Board, hereby notify that, on the.....day of.....19.....
at.....[1] A.M./P.M. .....
living at .....
was delivered { [1] by me..... / [1] before my arrival (B.B.A.).....
of a still-born child, no registered medical practitioner being in attendance at the time of birth.

Sex.....
Full term or premature (No. of months).....
Condition of child (whether macerated or not).....
.....
Presentation.....
Signed.....Certified Midwife.
Address.....
.....

(*d*) *Form of Notification of having Laid out a Dead Body.*

To the Local Supervising Authority of the [1] Administrative County of.....
or [1] the County Borough of.....
or [1] the Urban District of.....

I, the undersigned, being a Midwife holding the Cer-

[1] Strike out the words not applicable.

tificate No.....of the Central Midwives Board, hereby notify that, on the.....day of..... 19..... .....I [1] prepared *or* [1] assisted to prepare the dead body of.....
on whom I was in attendance at the time of death, the particulars in respect of which are as below :—

Name of deceased.....
Address of deceased.....
.....
Age of deceased.....
Cause of death.....
Signed.....Certified Midwife.
Address.....
.....

(*e*) *Form of Notification of Liability to be a Source of Infection.*

To the Local Supervising Authority of the [1] Administrative County of.....
or [1] the County Borough of.....
or [1] the Urban District of .....

I, the undersigned, being a Midwife holding the Certificate No.....of the Central Midwives Board, hereby notify that,

[1] on the.....day of.....
.....19....., I was
[1] In attendance upon *or*, [1] In contact with
Name.....
Address.....
a person suffering from a condition supposed to be infectious, viz.....

[1] Strike out the words not applicable.

or

[1] { I [1] am myself suffering from, *or* [1] have recently suffered from.....

Signed.....Certified Midwife.

Address.....

.....

(f) Form of Notification of Artificial Feeding.

To the Local Supervising Authority of the [1] Administrative County of.....
or [1] the County Borough of.....
or [1] the Urban District of.....

I, the undersigned, being a Midwife holding the Certificate No.....of the Central Midwives Board, and being in attendance on
(Name).....
(Address).....
hereby notify that on the.....day of.....
it was proposed to substitute artificial feeding for breast feeding because [2].....

.....

The child was born on the.....day of.....

Signed.....Certified Midwife.

Address.....

.....

24. A Midwife shall keep a Register of Cases in the following Form :—

[1] Strike out the words not applicable.
[2] Give reasons.

No.....
Date of expected confinement.....
Name and address of patient.....
.....
Age.....
No. of previous labours and miscarriages.....
Date and **hour** of Midwife's arrival.....
Presentation.....
Date and **hour** of Child's birth.....
Sex of infant.....Born living or dead.....
Full time or premature.....No. of weeks.....
Name of Doctor if called.....
Complications (if any) during or after labour.....
.....
Date of Midwife's last visit.....
Condition of Mother then.....
.....
Condition of Child then.....
Remarks [1].....
.....
.....
.....

[1] If any drug, other than a simple aperient, has been administered in any way, state here the name and dose of the drug, and the time and cause of its administration. (See Rule 29.)

[1] 25. The Local Supervising Authority shall make arrangements to secure a proper inspection of the Register of Cases, bag of appliances, etc., of every

[1] See Rule 26.

midwife practising in the district of such Authority, and, when thought necessary, an inspection of her place of residence, and an investigation of her mode of practice. The midwife shall give every reasonable facility for such inspection.

26. The rules or parts of rules in this section (*E*) which are marked with an asterisk shall not apply to Midwives exercising their calling under the supervision of a duly appointed Medical Officer within Hospitals approved by the Central Midwives Board.[1]

27. No rule in this section (*E*), other than Rule 22 (2), shall apply to Certified Midwives exercising their calling in Poor Law Institutions under the supervision of a duly appointed Medical Officer.

28. The proper designation of a certified midwife is "Certified Midwife," thus, *e.g.*,

Mary Smith,
Certified Midwife.

No abbreviation in the form of initial letters is permitted, nor any other description of the qualification.

Provided that a midwife whose name has been admitted to the Roll in virtue of having passed the Examination of the Central Midwives Board, or in virtue of a qualification under Section 2 of the Midwives Act, 1902, or Section 10 of the Midwives Act, 1918, acquired by passing an Examination in Midwifery, may add the words "by examination" after the words Certified Midwife.

[1] These Rules are Nos. 6, 12, 12*a* 20, 21, 22 (1), 23, and 25

F. — DECIDING THE CONDITIONS UNDER WHICH MIDWIVES MAY BE SUSPENDED FROM PRACTICE.

1. In carrying out Section 8 (3) of the Midwives Act, 1902, it shall be the duty of the Local Supervising Authority to suspend a midwife from practice when necessary for the purpose of preventing the spread of infection, whether she has contravened any of the rules laid down by the Central Midwives Board or not, and in the exercise of that duty the Local Supervising Authority shall, after communicating their decision in writing to the midwife concerned, at once report any suspension (with the grounds thereof) to the Central Midwives Board.

2. The period of suspension under the foregoing rule shall not be longer than is required by the midwife for the purpose of disinfecting herself, her clothing, and her appliances to the satisfaction of the Local Supervising Authority; and if the period is expected to or does in fact last for more than twenty-four hours, that Authority shall forthwith communicate to the Central Midwives Board the special circumstances in which the prolonged suspension arises, and the matter shall be subject to revision by that Board.

3. In the exercise of the powers conferred on it by Section 6 (1) (*a*) of the Midwives Act, 1918, the Board may—

(*a*) suspend from practice for such period as it thinks fit in lieu of removing her name from the Roll

any midwife who, after investigation by the Board in manner prescribed by Section D of the Rules of the Board, has been found guilty of disobeying the Rules, or of other misconduct;

(*b*) suspend from practice until the case has been decided by the Board, and, in the case of an appeal, until the appeal has been decided by the High Court, any midwife whose conduct is under investigation by the Board on a charge of disobeying the Rules, or of other misconduct.

4. In the exercise of the powers conferred on it by Section 6 (1) (*b*) of the Midwives Act, 1918, the Local Supervising Authority may suspend from practice until the case has been decided—

(*a*) a midwife against whom it has taken proceedings before a Court of Justice;

(*b*) a midwife against whom it has reported a case for consideration by the Central Midwives Board.

The Local Supervising Authority shall in each case communicate their decision in writing to the midwife concerned, and forthwith report the suspension (with the grounds thereof) to the Central Midwives Board.

Note.—It is not intended that suspensions authorised by Rule *F* 4 (*a*) and (*b*) shall be used for punitive purposes.

G.—DEFINING THE PARTICULARS REQUIRED TO BE GIVEN IN ANY NOTICE UNDER SECTION TEN OF THE ACT.

NOTIFICATION OF PRACTICE.

The particulars required on the prescribed form Schedule Form VIII.) shall be as follows:—

(1) Her Christian name and surname in full, and if married since the grant of her certificate, the name under which it was formally granted to her.

(2) The number and date of the certificate granted by the Central Midwives Board to the person giving the notice.

(3) Her usual place of residence, and if she carries on her practice at another address that address also.

(4) If at any time she practises or acts as a midwife outside the area within which she usually resides or carries on her practice, the dates and addresses at which she so practised or acted.

SCHEDULE.

Form of Applications and Certificates required under the Rules.

APPENDIX OF FORMS.

FORM I.—*Certificate of Good Moral Character.*

(See Section *B* 1 (*c*).)

I certify that I have been personally acquainted with .....for a

period of.....years, and that she is trustworthy, sober, and of good moral character.
Dated this.....day of.....19.....
Name.....
Address.....
Position and authority for signing }.....
Signature of Applicant.....

FORM II.—*Central Midwives Board.*

(2 Edw. 7. c. 17.)

No.....Date.....
We hereby certify that.....
.....having passed the Examination of the Central Midwives Board, and having otherwise complied with the rules and regulations laid down in pursuance of the Midwives Act, 1902, is entitled by law to practise as a midwife in accordance with the provisions of the said Act and subject to the said rules and regulations.
..... Chairman.
..... Secretary.

FORM III. (*a*)—*Certificate of Training.*

(See Section *C* 1 (1).)

I certify that.....
has undergone a course of training in Midwifery (including

ante-natal clinical instruction) extending over a period of [1] { 3 months. / 4 months. / 5 months. / 6 months.

Dated this.....day of.....19.....
Name.....
Address.....
[2] Position and authority for signing }.....
Signature of applicant .....

FORM III. (*b*).—*Certificate of Attendance on Labours.*

(See Section *C* 1 (1) (*a*).)

I certify that.....
has, under my supervision and to my satisfaction, during a period of [3].....months attended and watched the progress of not fewer than twenty labours, making abdominal and vaginal examinations during the course of labour, and personally delivering each patient.

[1] *Note.*—The person signing the certificate must enter the period of training, which must not be less than four months in the case of a candidate who presents a certificate in the Form V. (*a*), (*b*), (*c*), or (*e*), three months in the case of a candidate who presents a certificate in the Form V. (*d*), five months in the case of a candidate who presents a certificate in the Form V. (*f*), and not less than six months in all other cases.

[2] See *C* 2 (1).

[3] Here fill in the number of months.

Dated this.....day of.....19.....
Name.....
Address.....
[1] Position and authority for signing }.....
Signature of applicant.....

FORM III. (*c*).—*Certificate of Attendance during the Lying in Period.*

(See Section *C* 1 (1) (*b*).)

I certify that.....
has, under my supervision and to my satisfaction, during a period of [2].....months, nursed twenty lying-in women and their infants during the ten days following labour.
Dated this.....day of.....19.....
Name.....
Address.....
[1] Position and authority for signing }.....
Signature of applicant.....

FORM IV.—*Certificate of having Attended a Course of Lectures.*

(See Section *C* 1 (1) (*c*).)

I certify that.....
has attended to my satisfaction a course of not less than

[1] See *C* 2 (1).
[2] Here fill in the number of months.

twenty lectures on the subjects enumerated in Rule *C* 5 extending over a period of not less than three months, and delivered by myself.

Dated this.....day of.....19.....
Name .....
Address.....
Professional qualifications .....
[1] Position and authority for signing } .....
Signature of applicant.....

FORM V. (*a*).—*Certificate of Three Years' Training in a General Hospital.*

(See Section *C* 1 (2) (*a*).)

I certify that .....
possesses a certificate showing that she has undergone a three years' course of training as a nurse in.....
Hospital, being a General Hospital which contained not less than one hundred beds during the whole of the period of such training.

Dated this.....day of.....19.....
Name .....
Address.....
[2] Position and authority for signing } .....
Signature of applicant.....

[1] See *C* 2 (2).
[2] Se *C* 2 (3).

FORM V. (*b*).—*Certificate of Three Years' Training in a Poor-Law Institution.*

(See Section *C* 1 (2) (*b*).)

I certify that.....
has undergone a three years' course of training as a nurse in....., being a Poor-Law Institution recognised by the Ministry of Health as being a Training School for Nurses and maintaining a Resident Physician or House Surgeon and a Matron or Superintendent Nurse.

Dated this..... day of..... 19.....
Name .....
Address .....
[1] Position and authority for signing } .....
Signature of applicant .....

FORM V. (*c*).—*Certificate of Enrolment as a Queen's Nurse or of Registration by the College of Nursing, Limited.*

(See Section *C* 1 (2) (*c*) and (*d*).)

I certify that the name of..... appears on the { [2] Roll of Queen's Nurses, / [2] Register of the College of Nursing, Limited, on this date.

Dated this..... day of ..... 19.....
Name .....
Address .....

[1] See *C* 2 (3).
[2] Strike out the words not applicable.

[1] Position and authority for signing .....
Signature of applicant.....

FORM V. (*d*).—*Certificate of having undergone a Course of Training in a Gynæcological or a Children's Ward.*

(See Section *C* 1 (2).)

N.B.—This form can only be presented with Form V. (*a*).

I certify that.....has undergone a course of training during a period of not less than three months in

[2] (*a*) A Gynæcological Ward, *or*

[2] (*b*) A Children's Ward being a ward in which new-born babies are received for treatment

in the..... Hospital being the General Hospital referred to in Form V. (*a*) and providing systematic instruction in certain subjects required for the Certificate of the Central Midwives Board.

Dated this..... day of ..... 19.....
Name.....
Address .....
[1] Position and authority for signing .....
Signature of applicant.....

[1] See *C* 2 (3).
[2] Strike out the words not applicable.

FORM V. (*e*).—*Certificate of having undergone a Course of Instruction in Nursing in a Public Special Hospital for Women.*

(See Section *C* 1 (2).)

I certify that.....has undergone a course of three years' instruction in nursing in ..... Hospital, being a Public Special Hospital for Women containing, during the whole of the period of such instruction, not less than fifty beds.

Dated this ..... day of .....19.....

Name.....

Address.....

[1] Position and authority for signing } .....

Signature of applicant.....

FORM V. (*f*).—*Certificate of having undergone a Course of Instruction in Nursing in a Children's Hospital or a Gynæcological Hospital.*

(See Section *C* 1 (2).)

I certify that.....has undergone a course of six months' instruction in ..... Hospital, being a [2] Children's or [2] Gynæcological Hospital, approved by the Board.

Dated this.....day of.....19.....

Name.....

Address.....

[1] See *C* 2 (3).

[2] Strike out the words not applicable.

[1] Position and authority for signing } .....

Signature of applicant.....

FORM VI.—*Statutory Declaration by Applicant for Restoration of Name to the Midwives Roll.*

(See Section *D* (17).)

(1) I, the undersigned [2] ..... of [3] ..... say on oath that the following are the facts of my case, and the grounds on which I seek the restoration of my name to the Midwives Roll.

(2) On the [4] .....day of.....19.....my name was duly enrolled by virtue of the following qualification, namely [5] .....

(3) At an inquiry held on the [6] .....day of..... 19.....the Central Midwives Board directed my name to be removed from the Midwives Roll and my certificate to be cancelled.

(4) The offence for which the Central Midwives Board directed the removal of my name and the cancelling of my certificate was [7] .....

.....

[1] See *C* 2 (3). [2] Insert full name.

[3] Insert address.

[4] Date of Certificate granted by the Central Midwives Board.

[5] Qualification appearing on Certificate.

[6] Date of inquiry.

[7] Insert charge on which name was removed.

(5) Since the removal of my name from the Roll I have been residing at [1].....
and my occupation has been [2].....

(6) It is my intention if my name is restored to the Roll to practise as a Midwife at [3].....
.....

(7) The grounds of my application are [4].....
.....
(Signed).....
Declared at.....
on the.....day of.....19.....
Before me.....

A Commissioner of Oaths.

FORM VII.—*Certificate in Support of Application for Restoration of Name to the Midwives Roll.*

(See Section *D* (18).)

I .....
of.....
certify as follows:

(1) I am [5].....

[1] Insert place of residence.

[2] Insert occupation.

[3] Insert proposed place of practice.

[4] All the facts and reasons in support of the application should be stated shortly and clearly.

[5] State whether Justice of the Peace, Minister of Religion, or registered Medical Practitioner, and give particulars of position.

(2) I have been and am well acquainted with the said.....
both before and since her name was removed from the Midwives Roll.

(3) The said.....
is the person whose name formerly stood in the Midwives Roll with the following address and qualification:

[1] Address.....
.....
Qualification.....

(4) The said.....
is now trustworthy, sober, and of good moral character.

(5) I have read paragraphs (4) (5) and (6) of the application (Form VI.), and the statements therein contained are to the best of my knowledge, information and belief true.

Signature.....
Address.....
Position and authority for signing
Date.....

FORM VIII.—*Midwives Act*, 1902, *Section* 10.

Notification of Practice.

See Section G, on page 131.

To the Local Supervising Authority of [2]the Administrative County of.....

[1] Insert address and qualification as formerly given in Midwives Roll.

[2] Strike out the words not applicable.

or [1] the County Borough of.....
or [1] the Urban District of.....
[1] * I, *A.B*.....
Address.....
holding a certificate from the Central Midwives Board, No....., dated the.....day of.....19....., hereby give you notice of my *intention to practise* as a Midwife within your area during the year 19.....
Dated this.....day of.....19.....
.....(Signed) *A.B.*

(and in the event of having practised outside any area notified as above)

[1] † I, *A.B*.....
residing at.....and
pursuing my calling at.....
acted as a Midwife at.....
within your area on the.....day of.....19.....
Dated this.....day of.....19.....
.....(Signed) *A.B.*

(*The directions appearing before Rule E* 1 *will also appear on the back of this form.*)

[1] Strike out the words not applicable.
* This notice to be sent before commencing to practise, and a like notice in the month of January in each year.
† This notice to be sent within forty-eight hours.

FORM IX.—*For Applicants who have passed the Examination of a body whose Standard of Training and Examination is equivalent to the Standand adopted by the Board.*

CENTRAL MIDWIVES BOARD.

(2 Edw. 7, Ch. 17, and 8 & 9 Geo. 5, Ch. 4.)

We hereby certify that .....
..... is entitled by law to practise as a midwife in England and Wales in accordance with the provisions of the Midwives Acts, 1902 and 1918, and subject to the rules and regulations laid down in pursuance thereof, by reason of holding a Certificate granted in virtue of having passed the examination of
.....
.....
..... Chairman.
..... Secretary.

FORM X.—*For Applicants who have not passed the Examination of a body whose Standard of Training and Examination is equivalent to the Standard adopted by the Board.*

CENTRAL MIDWIVES BOARD.

(2 Edw. 7, Ch. 17, and 8 & 9 Geo. 5, Ch. 4.)

We hereby certify that .....
..... is entitled by law to practise as a midwife in England and Wales in accordance with the provisions of the Midwives Acts, 1902 and 1918, and

subject to the rules and regulations laid down in pursuance thereof, by reason of holding a Certificate granted by .....

.....

..... Chairman.

..... Secretary.

REMOVAL FROM OR RESTORATION TO THE MIDWIVES' ROLL.[1]

The procedure is as follows:—

When it is reported to, or otherwise brought to the attention of, the Central Midwives Board that a Midwife has been convicted of a felony, misdemeanour or offence, or has been guilty of disobeying the rules and regulations laid down under the Midwives Act, 1902, or of other misconduct, the Secretary shall, when investigation by the Local Supervising Authority is required, forthwith communicate such report or information to the Local Supervising Authority of the area within which the midwife resides, or of that in which the felony, misdemeanour, offence, act of disobedience of the rules and regulations, or other misconduct is alleged to have been

[1] Midwives against whom offences are alleged are usually summoned to appear, in the first instance, before the Midwives Acts Committee of their Local Supervising Authority. They are entitled to be represented by a solicitor, and to be accompanied by a friend. The Supervising Authority may, however, refer the case at once to the Central Midwives Board.—EDITOR, *Midwives' Pocket Book*.

committed. He shall also ask such Authority to investigate the matter, and to report whether or not, in their opinion, a *prima facie* case of malpractice, negligence or misconduct has been established against the midwife.

Any report by a Local Supervising Authority shall, as soon as may be after its receipt by the Secretary, be laid, with all other information relating to the case to which it refers, before the Penal Cases Committee, who shall report thereon to the Board, and upon such report the Board shall proceed to consider whether such a case has in their opinion been made out as to require an answer from the accused person.

If within a reasonable time after the making of a request for investigation of any case no report has been received from the Local Supervising Authority, the Committee shall report to the Board on the case without further delay, or after such special investigation by a Solicitor appointed by the Board as they may think necessary. The Committee may, if they think fit, take the advice of the Solicitor at any time on a case before them, and may instruct the Solicitor to obtain proofs of evidence in support of the allegations against the accused person. The Committee may, before reporting on any case to the Board, ask the accused person for any explanation she may have to offer, and may consider such explanation and report thereon to the Board.

If the Committee resolve that a case is one upon which proceedings ought to be commenced for the removal of a name from the Roll and the cancelling of a certificate, the Secretary shall direct the Solicitor to take all necessary steps for verifying the evidence to be submitted to the Board, and for obtaining the necessary

documents and the attendance of witnesses. Any answer, evidence, or statement forwarded, or application made, by the accused person between the date of the issue of the notice hereunder mentioned and the day named for the hearing of the case by the Board shall be dealt with by the Secretary, in consultation with the Solicitor, in such manner as he may think fit, or may be referred by him to the Committee.

All statements in the nature of evidence proposed to be relied on as part of the case against the accused person, except proofs of convictions verified by the officer of a duly constituted Court, which cannot be laid before the Board by oral evidence, shall be verified by statutory declaration. A copy of any such statutory declaration or certificate of conviction shall be supplied free of cost to the accused person before the day fixed for the meeting of the Board to deal with the case, or for the adjournment thereof.

A copy of any defence in writing by an accused Midwife shall be sent to the Local Supervising Authority before the hearing of the case if practicable.

If the Board decide that such case has been made out, proceedings for the removal of a name from the Roll or the cancelling of a certificate shall be commenced by the issue of a notice in writing, addressed to the accused person by the Secretary, on behalf of the Central Midwives Board. Such notice shall specify the nature and particulars of the charge alleged against the accused person, and shall inform her of the day on which the Board intend to deal with the case and decide upon the said charge. The notice shall further require the accused person to forward her certificate,

register of cases, and pulse and temperature record to the Secretary seven days before the hearing of the case, to answer in writing the charges brought against her, and to attend before the Board on such day.

The notice, accompanied by a copy of these Rules, shall be sent by registered letter to the last-known address or the enrolled address of the accused person, and shall be so sent as to allow at least twenty-one days between the day on which the notice is issued and the day appointed for the hearing of the case by the Board.

The case shall be heard at a special meeting of the Board, of which at least seven days' notice shall be sent by the Secretary to each member, and to the Local Supervising Authority who shall be given the opportunity to attend and assist the Secretary. The accused person may be represented or assisted by a friend, legal or otherwise, provided that seven days' notice of the intention of such legal representative to appear on behalf of the accused shall have been received by the Secretary.

When in the course of proceedings for the removal of a Name from the Roll charges are made against a Local Supervising Authority or any of its officers, to which an answer may be reasonably expected, such Authority shall in each case be given the opportunity to appear and be heard at the hearing of the case.

At the hearing of the case the Secretary, or other person appointed by the Board for the purpose, shall first state to the Board the facts of the case and the charge alleged against the accused person, and shall then submit to the Board the evidence which he has received in support of the charge. The accused person, or her representative, shall be entitled to cross-examine any

witness appearing against her on matters relevant to the charge.

When the evidence in support of the charge and a statement by or on behalf of the person making the charge are concluded, the accused person, or her representative, shall be invited by the chairman to address the Board, and to tender evidence in answer to the charge.

If the accused person does not attend as required, either personally or by representative, the Board may proceed to hear and decide upon the charges in her absence.

Upon the conclusion of the whole case the Board shall deliberate thereon, and shall, after due consideration of all the relevant evidence on either side, whether oral or documentary, pronounce its decision either forthwith or at a subsequent meeting.

If the Board find the charges against the accused person to be proved either in whole or in part, and the offence cannot, in its opinion, be adequately dealt with by censure or caution, the Board may direct the Secretary to remove the name of the accused person from the Roll of Midwives and to cancel her certificate.

Notice in writing, by registered letter, of the removal of the name from the Roll and of the cancelling of the certificate shall be sent by the Secretary to the person found guilty of the offence, and to the Local Supervising Authority of the district within which she resides.[1]

---

[1] Any midwife who for an alleged offence is cited to appear before the Central Midwives Board should engage

RESTORATION TO THE ROLL OF A NAME REMOVED.

Application for restoration to the Roll shall be made in writing addressed to the Secretary of the Central Midwives Board, and signed by the applicant, stating the grounds on which application is made. In cases where the cancelled certificate has not already been returned to the Board, it must be sent in with the application, or a statutory declaration made of its previous loss or destruction.

The application must be accompanied by a statutory declaration made by the applicant, setting forth the facts of the case and stating that she is the person originally enrolled. The declaration shall be in the Form given in the Schedule.

The statements in the application and declaration must also be supported by the certificate of the Local Supervising Authority of the district in which the applicant is resident and by the certificates of at least two persons, being Justices of the Peace, Ministers of Religion, or registered Medical Practitioners, who were and are well acquainted with the applicant before and since the removal of her name. These certificates must each of them testify to the applicant's identity and

a solicitor for her defence, as no matter how innocent or mistaken her conduct may have been, she cannot adequately state her own case or cross-examine witnesses like an experienced lawyer. Members of the Midwives Institute, who pay a slightly increased subscription, are entitled to assistance from the Protection and Defence Committee.—EDITOR, *Midwives' Pocket Book.*

present good character, and they shall be in the Form given in the Schedule.

The application, when duly supported by the declaration and certificates as hereinbefore provided, shall be considered at a meeting of the Board, made special for the purpose, of which at least seven days' notice shall be sent by the Secretary to each member. The Board may adjourn the consideration to a future date, or require further evidence or explanations from the applicant.

After consideration of all the circumstances of the case, as submitted to them in accordance with the provisions of these Rules, the Board may, if they think fit, direct the Secretary to restore the name of the applicant to the Roll of Midwives, and to issue a new certificate to her, on payment of the fee of 10s.

A copy of these Rules and of the Forms prescribed in the Schedule shall be supplied by the Secretary to intending applicants on demand.

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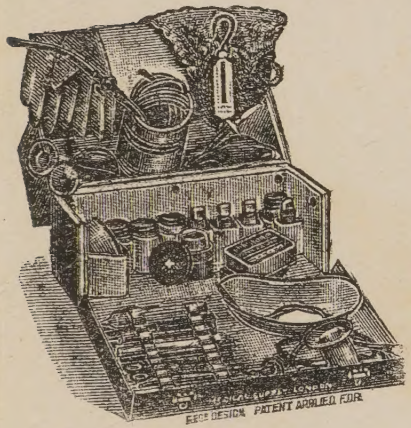

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